Knowledge, Attitude and Practices of Unorganised Sector Workers towards Diabetes

A Report by United Way Mumbai

United Way

United Way Mumbai

Foreword

According to the World Health Organization, 23 million people in India have diabetes, more than in any other country in the world. By 2025, one in seven people in India will have developed the disease, making diabetes a major health-care concern in the country, especially in urban areas.

Through the "Live United Against Diabetes" campaign, United Way Mumbai has been conducting targeted medical interventions, public education and awareness drives on a massive scale, with specific focus on the urban poor.

The increasing prevalence of diabetes in the urban poor is aggravated due to lack of awareness about the disease and inability to access timely medical interventions. Among the urban poor, the project focuses on the unorganized sector - a segment of society that tends to be overlooked for welfare schemes, and is, therefore often neglected in the fight against diabetes. The issue is further compounded by the misplaced understanding that people from the lower income group such as daily wagers, cannot be prone to diabetes, this being a rich man's disease.

This focussed study is our attempt to understand the level of awareness, perspective and behaviour related to diabetes among the unorganised or informal sector. Findings of this report will help us devise effective Information-Education-Communication campaigns targeting the unorganised sector and other relevant community stakeholders for education and to prevent diabetes. We hope this report will be of value to stakeholders, both public and private, and especially those who work in the field of critical community health challenges.

We are grateful to the community members who were a part of this study and willingly responded to the research questionnaire. Their insights have proven to be invaluable in preparing this report. Our heartfelt thanks to our NGO partner, Mahila Vikas ani Shishu Sanskar Kendra who supported us in mobilising respondents in communities. We are also indebted to Bristol-Myers Squibb Foundation, a long standing supporter in our campaign promoting education on diabetes and the ways to prevent it.

Yours Sincerely,
Jayanti Shukla
Chief Executive Officer

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Abbreviations

DALY	Disability Adjusted Life Year
GDP	Gross Domestic Product
IDF	International Diabetes Federation
IEC	Information, Education and Communication
ILO	International Labour Organisation
KAP	Knowledge, Attitude and Practices
NCD	Non Communicable Disease
NCEUS	National Commission for Enterprises in the Unorganised Sector
NGO	Non-Governmental Organisation
UWM	United Way Mumbai
WHO	World Health Organisation

Introduction and Literature Review

Chapter I: Introduction and Literature Review

Diabetes Mellitus or Diabetes, as it is commonly known was rarely a cause of death in the world as of the year 2000, but in just 18 years' time, it has been ranked as 7th out of 10 most frequent causes of death, globally.[1] This sudden rise is evidence of the widespread and epidemic occurence of diabetes and the impact it can have on communities. The World Health Organisation reports the global prevalence of diabetes as being 8.5% in 2014, up from 4.7% in 1980. The significant rise in its prevalence is due to the increased rate of diabetes in the Eastern Mediterranean and South East Asian regions, which has more than doubled in three decades. The data also suggests that men are more prone to diabetes than women and globally all regions show the same trend.[2] Almost half of all deaths attributable to high blood glucose levels occur before the age of 70 years.

Along with the health issues, diabetes also leads to significant financial burden on individuals and families. It is estimated that, every year more than US$ 827 billion are spent as a direct cost for the treatment of diabetes, which creates major economic problems for individuals and countries.[2] Lower and middle income countries suffer even more due to a higher prevalence of diabetic individuals.

India has an extensive number of diabetes sufferers and is predicted to soon be the diabetes capital of the world.[3] The International Diabetes Federation reports a diabetes prevalence rate of 8.8% in India, with more than 72 million Indians suffering from the disease. Recent data published by the Indian Council for Medical Research suggests an exponential growth in the proportion of deaths due to non-communicable diseases (NCD) (from 37.9% in 1990 to 61.8% in 2016). Among the NCDs, the largest burden or Disability Adjusted Life Year (DALY) increase is attributed to diabetes, with an increase of 80% compared to a 34% increase in Ischaemic Heart Disease. [4] DALY is a measure to understand the impact of a disease on human beings and is expressed as number of years lost due to ill health, disability or premature death due to a specific disease.

India is going through an economic reform leading to increased urbanization, heavy internal migration and creation of huge slum pockets across almost all cities. A recent study on historical evidences of diabetes reported its strong association to urbanization.[5] Another report states that the direct and indirect out of pocket expenses to treat diabetes in India are over Rs. 1000 per month.[6] People living in marginalized communities, especially having to earn daily wages find it difficult to cope with the burden of diabetes and its resultant personal financial expenditures.

Unorganised sector workers in India

The National Commission for Enterprises in the Unorganised Sector (NCEUS) defines the informal/unorganised sector as comprising all unincorporated private enterprises owned by individuals or households engaged in the sale and production of goods and services operated on a proprietary or partnership basis, with less than ten workers.[7] According to ILO reports, around 8% of those employed in India belong to the informal sector, contributing to 40% of the GDP. Average daily wages are substantially lower in the informal economy (approx. INR. 350 to 450) and there is a higher preponderance of impoverished employees working in the informal sector.[8] In addition, workers in the informal economy are less likely to benefit from employment schemes and social protection programs. Workers in the Indian informal sector are engaged in various occupations, which involve many work related hazards that are a risk to their health.

Occupational safety and health coverage policies for informal sector workers are rare in India. There are policies which specify the guidelines for good working conditions, but their implementation is often questionable.[9] The poor socio-economic background of the workers in the informal sector means that they are vulnerable to environmental and work place hazards that directly affect their health.

The reasons for their vulnerability are:
(a) irregular work; (b) low economic status; (c) little or no bargaining power; (d) lack of social security; (e) low purchasing power; (f) little or no access to institutional credit; training and information and (g)

lack of assets (Kantha, 2012).[10]

All these result in irregular and long working hours, work stress, insufficient and irregular sleep / rest, irregular food intake, the absence of a balanced diet, lack of knowledge and resources, lack of easy access to health care services, etc. that pose the threat of various lifestyle diseases, including diabetes in the workers' lives.

Non communicable diseases such as diabetes have strong association with the individual's behaviour and lifestyle practices. Diabetes prevention, care and management depend upon the patient's knowledge about the disease and willingness to follow specific practices throughout life, failing which can lead to serious medical complications. For people working in unorganised sector, this can lead to severe health and financial impact on themselves and family. Thus, it is necessary to understand the level of knowledge, their attitude and ongoing practices to prevent them from developing Diabetes.

KAP studies on diabetes among unorganised sector workers

Studies conducted across the world to assess the knowledge, attitudes and practices (KAP) related to diabetes among marginalized communities report an overall lack of correct information giving rise to bad prognoses and clinical outcomes due to diabetes.

The results of a cross sectional KAP study conducted in South East Ethiopia depict that 52.5% of participants were knowledgeable, 55.9% and 56.6% of participants had positive attitudes and good practices regarding diabetes mellitus respectively. The study shows prevalence of poor knowledge, attitude and practices related to diabetes in the population of Bale Zone administrative town, particularly in regards to diabetes symptoms and risk factor modifications. The study reveals that great emphasis on health, education regarding symptoms and the risk factor modification for diabetes is necessary. [11]

A study conducted on the knowledge, attitudes and practices related to diabetes mellitus among the general public of Galle district in Southern Sri Lanka reveals that the majority had adequate knowledge on diabetes, but there was still some room for improvement as a fourth of study participants had poor knowledge of various aspects of diabetes. It brings up the interesting fact of the gap between the knowledge of and attitudes towards diabetes and its management. The study also finds that even though the majority had above average knowledge, it was not reflected in their attitude towards diabetes.[12]

The results of the KAP study conducted among the diabetic and non-diabetic population in Bangladesh shows an average level of diabetes awareness and good levels of positive attitudes in regards to the importance of diabetes care. At the same time, the study has found moderate levels of diabetes related health practices in Bangladesh. The study suggests the need to carry out large scale awareness programs at grass root levels and to identify the appropriate means to spread the message to the general population. The KAP towards diabetes was found to be better among people who were living with diabetes compared to people without diabetes.[13]

In a national population based survey done in Mongolia in 2010, where half of the participants were from urban areas and the other half from rural areas, the study findings demonstrated a low knowledge of diabetes, where one in five reported to have never heard of the word diabetes prior to the interview. This knowledge gap was particularly pronounced in the rural participants and those from small regional towns.[14]

Awareness drive underway, to reach out to workers from the unorganised sector

KAP studies on diabetes in India:

A hospital based study in Gujarat to assess the effect of awareness of diabetes on clinical outcomes reports that the overall knowledge regarding diabetes among the general population is very low. The only information people have is regarding a few symptoms, while the causes, complications and treatment are unheard of. This has led to poor

Generating awareness regarding diabetes among auto-rickshaw workers

self-management of the disease, leading to poor clinical outcomes.[15]

Another study conducted in Gujarat among community members (mostly daily wage workers and housewives) reported a severe lack of knowledge about diabetes with only 46% respondents aware of the name. The study also states that most of the respondents did not have regular blood tests as they could not afford it.[16]

A study conducted in Bijapur, Karnataka to understand the knowledge attitude and practices among Type 2 diabetic patients in hospital revealed that only 8% of the patients had a good knowledge about the disease. The practices survey also reported that only 40.68% performed regular exercise and less than 50% underwent regular blood glucose testing.[17]

The above discussion clearly points to the need for a greater depth of understanding of people's level of knowledge, their attitude and practices related to diabetes prevention. Most studies conducted across the world have included general public or diabetes patients. It is evident that the informal sector workers in cities like Mumbai, who are not covered under any employee benefit programmes and have much lower wages than workers from the organised sectors are more vulnerable to the personal, financial and social impact of poorly controlled diabetes.

This establishes the necessity of a study among the informal sector workers to identify the status of their knowledge, attitudes and practices towards diabetes. Such a study will help in identifying interventions for the prevention, early diagnosis, treatment and overall public advocacy for fighting diabetes.

Study Design

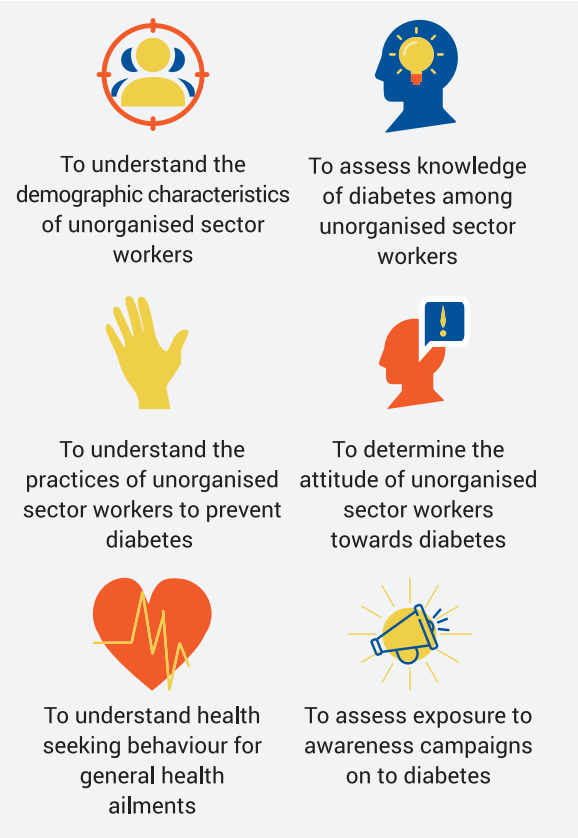
Chapter II: Study Design

This chapter discusses the overall study design, data collection method and data analysis activities for the purpose of answering questions of this research study.

3.0 Objective of the Study

The objective of study is to assess the knowledge, attitude and practices with regards to diabetes among the unorganised sector workers in Mumbai.

Following are the specific objectives -



3.1 Target Locations of the Study

The research team selected study locations based on the density of informal work sites and their accessibility in Mumbai. For this, we consulted relevant government officials, non-profit organisations working with unorganised sector workers and other stakeholders. This helped in determining the target geographies in Mumbai for the purpose of this study. The following locations were identified and selected for this study.

Table 1: List of Locations

Sr. No.	Locations
1	Reay Road Cement Godown, Reay Road
2	Kalyan Street and Puna Street, Masjid Bandar
3	Bhaucha Dhakka, Mazgaon Dockyard
4	Yellow Gate, Masjid Bandar
5	Wadala RTO, Wadala
6	Gavan Pada and Gadkari Khan, Mahul Gaon, Chembur
7	Cotton Chowk, Cotton Green
8	Bhandup Market
9	Swatantraveer Savarkar Mandai, Dadar
10	Lokamanya Tilak Market, Grant Road
11	Maa Saheb Meena Tai Thakre Flower Market, Dadar
12	APMC Market, Vashi

3.2 Study Design

The study is descriptive - ideal for the prime objective of understanding respondents' knowledge, attitude and practices in relation to diabetes as it helps to explain the respondents' perceptions and views.

3.2.1 Study Population

The chosen respondents belonged to the unorganised sector in Mumbai. Selection criteria were based on the following indicators for a uniform background.

- Workers in informal workspace
- Above 18 years of age
- Not on payroll of the workspace
- Not covered by diabetes testing and awareness interventions by UWM or its NGO partners

3.2.2 Sampling and Sample Size

Sampling Methodology

The study used a purposive sampling method with the following process:

One random respondent was selected from a group of workers at the site and was requested to be a part of this study. If the selected respondent was ineligible or did not consent to be part of the study, another worker from the same site was randomly selected. A questionnaire was administered if they were eligible as per the set criteria and consented to participate.

Sample Size

500 unorganised sector workers were selected, proportionately divided between the study locations.

Tools for Data Collection

Screening Schedule: A screening questionnaire was administered to eliminate respondents who attended an awareness session or were part of any of UWM's or an NGO partner's diabetes testing camps in the last year. The date of completion of data collection was considered the cut off date. Criteria also included respondents aged 18+ years, working at an informal site and consenting to participate in the study.

Questionnaire: The questionnaire was administered to the respondents eligible as per the set criteria and willing to participate in the study. It captured data pertaining to respondents' demographic profile, knowledge, attitude and practices related to diabetes, and good health and exposure to Information - Education - Communication campaigns on diabetes.

Project Management

This research study was implemented in six stages:

Stage -1 – Finalization of Research Methodology

A comprehensive literature review was carried out in consultation with stakeholders to determine research methodology and tools.

Stage -2 Pre-test and finalization of research tool

The aim of the pre-test was to finalize the questionnaire and to test the fieldwork process.

- The pre-test exercise was conducted in an actual field setting rather than in the study areas.
- A total of 5 questionnaires were pre-tested.
- The following key areas were tested
  - Flow of questions
  - Checking translation
  - Skip patterns
  - Ease in administering questionnaire

Based on these results, the questionnaire was modified.

Stage 3 - Recruitment and Training of field team

An experienced and qualified field team was deployed, comprising male and female investigators, who completed the data collection within 14 days. The team underwent an in-depth training, including classroom training, mock practice and pilot testing of the questionnaire, followed by a post pilot study debriefing for investigators to clarify their doubts pertaining to the questionnaire and the field work. Based on this, the interview schedule was modified.

Stage 4 - Data Collection

Informed consent of the respondent

Respondents were informed that participation in the study was voluntary and were assured of complete confidentiality and anonymity. They were told about the nature of the study along with their right to withdraw at any point and not respond to specific questions. It was also emphasized that their responses will not be shared individually, but as aggregated data findings. Additionally, no benefit monetary or in kind was promised or provided in exchange for their participation. All the respondents' queries were answered and all doubts clarified to ensure they understood the purpose of the study. Most interviews were conducted at respondents' workplaces to avoid affecting their work schedule.

Quality Control and Monitoring

For quality control and monitoring, the following strategy was followed:

- The team supervisor accompanied all field team members for the first three interviews.
- The supervisor undertook 5% back checks and 10% spot checks.
- Scrutiny of the collected data was carried out by all team members for each completed interview.

Stage 5 - Data entry and Analysis

The data was entered into a Microsoft Excel sheet and scrutinized daily to maintain consistency. Once the data was cleaned and consistent, tables were generated as per the analysis plan. Descriptive statistics such as frequency, calculating mean and median were carried out as required.

Stage 6 - Report Writing

The report incorporates the findings generated from the quantitative survey data. A detailed chapter organization plan is given below:

Chapter 1 – Introduction and Literature review
Chapter 2 – Study design
Chapter 3 – Demographic profile of the respondents
Chapter 4 – Knowledge, attitude and practices of respondents towards diabetes
Chapter 5 – Exposure to IEC activities
Chapter 6 – Conclusion and Recommendations

Demographic Profile of the Respondents

Chapter III: Demographic Profile of the Respondents

Findings of the study:

For the purpose of assessing the respondents' knowledge, attitude and practices related to diabetes the project team interviewed 506 individuals working in the informal sector, including workers from industries like fishing, flower and fruit markets, construction workers, daily wage labourers, truck drivers, etc. The respondents were predominently male, largely due to the type of occupations targeted for the study. The findings of the study are described below:

Age of respondents:

Distribution by Age Group (in Years)	Number of respondents	Percentage
<20	7	1.4
20-29	99	19.6
30-39	157	31
40-49	142	28.1
50-59	60	11.9
60-69	38	7.5
70–80	3	0.6

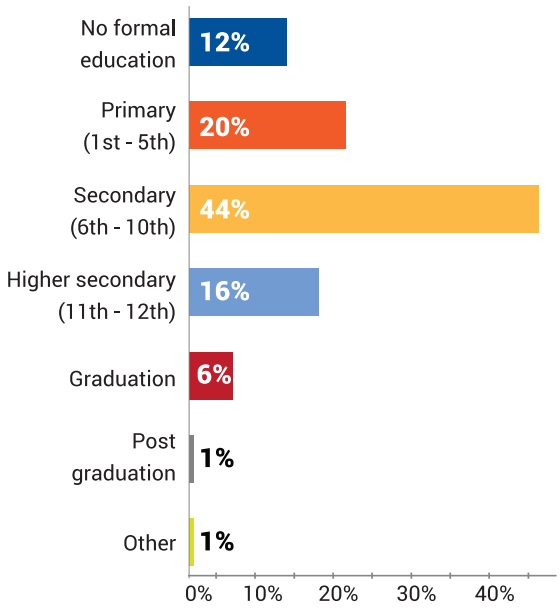
The youngest participant to be interviewed was 18 years old, while the oldest was 76 years of age. More than 78% of the participants were from the age group of 20 to 50 years, which are professionally the most productive years in an individual's life.

Gender of respondents:

Distribution by Gender	Number of respondents	Percentage
Male	460	90.7
Female	44	8.7
Transgender	2	0.4

Most of the study participants (90.7%) were male, while 8.7% of the participants were female. There were 2 transgender members as well.

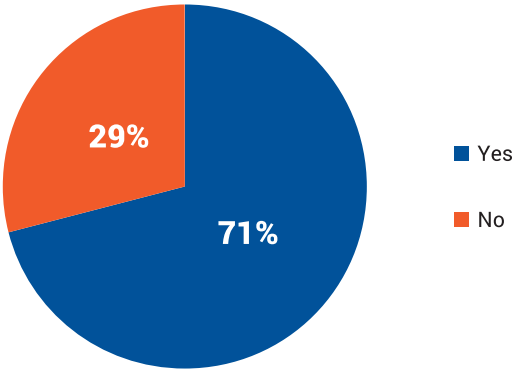
Education levels



The education level was assessed as the highest level of education obtained through formal schooling. The results show that 44% of the participants had attended secondary school (6th to 10th Standard) while 20% had completed only primary education. Only 16% had attended higher secondary colleges and 6% had completed their graduation.

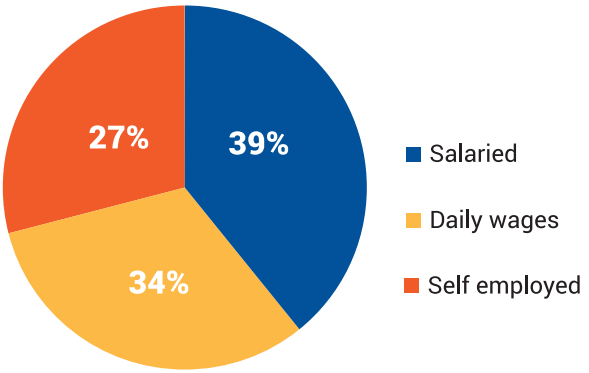
The data also shows that 12% of the participants had never attended any type of formal education.

Currently staying with family



The respondents were asked if they currently stayed with their family members. This included their spouse and/or children if they were married and parents and/or siblings for unmarried participants. 71% of the respondents were found to be currently staying with family while 29% were not. As family support is a key in self-management of diabetes, this information was necessary.

Employment Status



The employment status assessment had three categories - those who got fixed pay were termed as salaried, those who earned wages on a daily basis were recognized as daily wage earners and the ones who owned businesses/shops were categorized as self-employed. The population interviewed included 39% salaried, 34% daily wage workers and 27% self-employed individuals.

Hours of work per day

Hours of work per day	Number of respondents	Percentage
1-8 (1 shift)	195	38.8
9-16 (2 shifts)	302	60
More than 16 (3 shifts)	6	1.2

The number of working hours in a day is critical in informal sectors due to the lack of guidelines or mandates, which limit an individual's hours of work in a day. The participants were asked about how many hours per day they were involved in work or were engaged in seeking work. The hours of work were then categorized in shifts, each shift being 8 hours long. An analysis of the responses reveals that 60% of all respondents work for between 9 to 16 hours a day, while more than 38% work 1 shift a day i.e. 8 hours or less.

Current diabetes status

Diabetes status	Number of respondents	Percentage
Yes, I do have diabetes	91	18
No, I don't have diabetes	298	59
I don't know	117	23

When asked about the their current diabetes status, 59% responded that they have undergone testing and do not have diabetes, while 18 % responded that they do have diabetes. The crucial result is that 23% of the respondents were unaware of their diabetes status. This was mainly due to the fact that they had never undergone testing.

Knowledge, Attitude and Practices of Respondents Towards Diabetes

Chapter IV: Knowledge, Attitude and Practices of Respondents Towards Diabetes

Knowledge about diabetes

Particulars	Yes (%)	No (%)	Don't know (%)
About diabetes			
Have you ever heard of the word diabetes?	82	14	4
Do you have information on diabetes?	45	47	8
Causes of diabetes			
Is eating excess sugar and other sweet food a cause of diabetes?	49	20	31
Does smoking / alcohol intake lead to diabetes?	24	27	49
Are sedentary lifestyle & obesity risk factors for diabetes?	41	19	40
Is diabetes genetic?	40	18	42
Signs and symptoms			
Are frequent urination or increase in hunger/ thirst symptoms of diabetes?	33	21	46
Is blurry vision a sign of diabetes?	40	15	45
Impact of diabetes			
Does diabetes affect the kidney or heart?	35	15	50
Prevention and control			
Does regular exercise help to control diabetes?	54	12	34

Knowledge about diabetes is one of the major factors affecting the prognosis of the disease and its impact on individuals and families. Multiple studies across the world have confirmed this fact and it was crucial to understand the level of information on diabetes prevalent among the individuals from informal sectors. It is necessary to know this as complications ensuing from Diabetes can have catastrophic results in the lives of informal sector workers.

The results suggest that most of the respondents have heard the word diabetes (82%) but when it comes to knowledge about the facts of the disease, only 45% responded positively.

Do you have information on diabetes?	Yes (%)	No (%)	Don't know (%)
People with diabetes (n=91)	81.3	17.6	1.1
People without diabetes (n=298)	40.6	52	7.4

A detailed analysis of the respondents' diabetes knowledge status reveals that among the people with diabetes, the proportion of them having information on the condition is much higher (81.3%) than among those who do not have the disease (40.6%). This proves that information received is mostly during doctor - patient interaction than through general awareness.

Attitudes towards diabetes

Particulars	Agree (%)	Disagree (%)	Neutral (%)
Diabetes is not a serious disease	36	41	22
I am not at risk of getting diabetes	29	47	24
There is little hope of leading a normal life with diabetes	30	43	27
I would not disclose to others if I have diabetes	16	64	20
Diabetes is not really a problem because it can be controlled	62	12	26
Missing doses of diabetic medication will have a negative effect on disease control	67	11	23
A controlled and planned diet can control or prevent Type 2 diabetes	52	14	34
A diabetic patient should keep in touch with her/his doctor	87	4	10
It is important that every person is tested for diabetes	83	6	11
Diabetes can happen to anyone	74	9	17
A diabetic person should be isolated	12	69	19

An assessment of their attitude towards diabetes reveals interesting findings as the respondents are almost equally divided between the right and the wrong attitudes. Only 44% respondents believed that diabetes is a serious disease and 47% felt that they were at risk of developing diabetes. Most of the respondents were either in agreement (30%) or stayed neutral (27%) when asked if they feel that a diabetic person cannot lead a normal life, while 43% disagreed .

Disclosure of identity as diabetic was another perspective asked to participants to understand if they would be open to disclosing their diabetes status to the public if they developed the disease. 64% of the participants agreed, stating that they will be okay with people knowing their diabetes status.

Even though diabetes can be controlled and complications can be avoided by lifestyle modifications, it is still not any less of a problem compared to other diseases. Inadequate follow up and bad treatment compliance can lead to many harmful side effects. This was put forward as a question to the respondents and while most of the respondents (67%) agreed that poor treatment compliance can lead to negative side effects, only 12% thought that diabetes is a problem even if it can be controlled. The study shows a positive attitude among respondents in terms of prevention and control of diabetes through a planned diet (52%), regular follow up with professional medical personnel (87%), voluntary testing (83%) and the fact that everyone is vulnerable to the development of diabetes (74%). Most of the respondents also disagreed with the idea that an individual suffering from Diabetes should be isolated from community.

Practices to prevent and control diabetes

Diabetes related Practices	Yes (%)	No (%)
Do you regularly visit your doctor? (once in 3 months)?	41	59
Do you regularly check your blood glucose level? (Once in 3 months)?	28	72
Do you follow a controlled and planned diet?	38	62
Do you exercise regularly? (Daily 30 min walk / exercise)	26	74

Diabetes is a disease that requires strict diet control and a stringent daily routine. This is to ensure that the disease does not lead to serious complications. Among people do not suffer from diabetes, it is doubly necessary to avoid developing it, especially type II diabetes, which is lifestyle based.

Participants were also asked about their health seeking practices which included regular visits to doctor, regular blood testing for presence of diabetes, controlled and planned diet and regular exercise. It was observed that in all four areas, the participants did not follow best practices. Regular visits to doctors were undertaken by 41%, while only 28% underwent regular blood tests. Merely 38% followed a planned and controlled diet and 26% exercised regularly, e.g. 30 mins walking post dinner/30 mins exercise in the morning, etc.

Practice of regular blood glucose check-up as per diabetes status of respondents:

Regular Blood Glucose Testing	Yes (%)	No (%)
Respondents who have diabetes	63	28
Respondents who do not have diabetes	66	231
Respondents who don't know their diabetes status	10	107

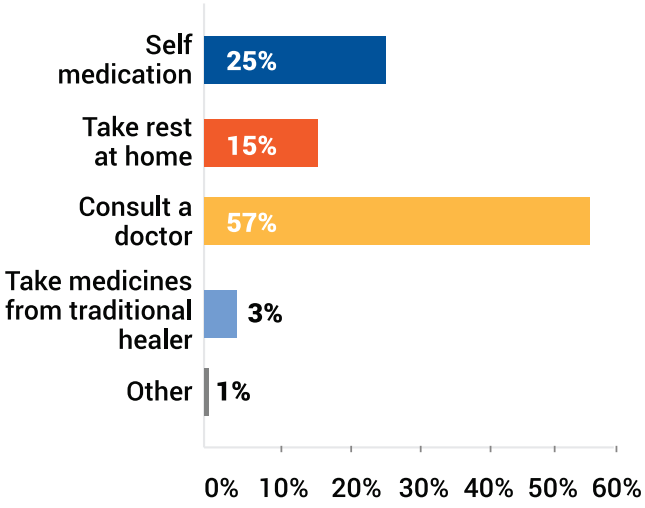
Regular blood glucose testing is essential for not only those who suffer from diabetes but also for those who do not. Adopting this practice can help in early diagnosis of the disease and initiate required treatment.

An in-depth analysis to understand which participants had regular blood test done, clearly indicates that those suffering from the disease undergo regular blood glucose testing, while those who are not suffering as well as those who are unaware of their diabetes status, do not undergo the test on regular basis.

Regular Blood Glucose Testing	Yes (%)	No (%)
Respondents who have information on diabetes	104	124
Respondents who don't have information on diabetes	30	208
Respondents who are unsure of information on diabetes	5	34

Another factor indicating why people undergo regular blood glucose testing is the availability of information and awareness about the disease. The data clearly shows a difference in the proportion of people with information undergoing blood glucose test in comparison to the number of people who do not have or are unsure about the information. This clearly indicates that proper information on the disease has a direct effect on good health practices.

First action during sickness:



First action during sickness is a good health practice , whereby every individual, when sick, should first consult a medical practitioner to seek proper evaluation and treatment. Our assessment revealed that 57% of the participants responded that they visit a doctor when sick. The proportion of individuals self-medicating and resting was also found to be significant ; 25% and 15% respectively.

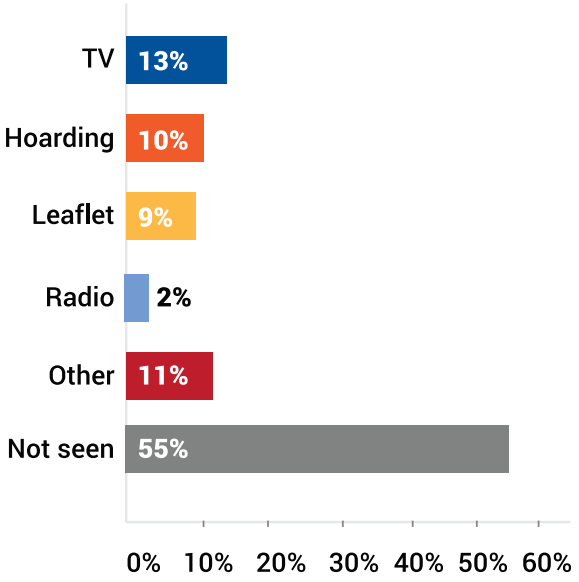
Exposure to IEC Activities

Chapter V: Exposure to IEC Activities

Exposure to Information about Diabetes:

Exposure to information about the disease was assessed by asking the participants if they had ever seen/heard/read an advertisement or any other Information - Education - Communication material focussed on diabetes awareness. Commercial advertisements and product branding were not considered under this section.

Exposure to information on diabetes



Exposure to information is one of the most important aspects of diabetes prevention and management. The observations made across many countries report the necessity of providing the appropriate disease-related information and its association with clinical outcomes.

In the current study, 55% of the participants responded that they had never been able to avail of any diabetes related information. The most common mode of gathering information was through television advertisements (13%), internet and social media, (11%), hoardings (10%) and leaflets/pamphlets (9%).

Conclusion & Recommendations

Chapter VI: Conclusion and Recommendations

This study was conducted among workers from informal sectors and reveals some major challenges needing to be addressed urgently. The most important of them all is clearly the awareness about diabetes and the necessity of conveying correct information to the masses. Studies across the globe have been able to identify the link between key information about diabetes and its impact on clinical outcomes for an individual. Our study reveals two major challenges prevalent in the city of Mumbai.

The first challenge is the availability of a credible source and significant spread of correct information. The study shows that information about diabetes is mostly available with those who suffer from the disease, which means that the exchange of information is limited to doctor-patient interactions and counselling sessions. The respondents' exposure to information data also shows the same result with more than half the population not exposed to any necessary information.

Information and awareness lead to healthy practices. This is very evident through the fact that the most important health exercise in diabetes prevention and management - i.e. regular blood glucose monitoring - is mainly practiced by those who have information about the disease

This study, therefore aligns with other global research indicating that Information - Education and Communication is of great importance in the pursuit of spreading awareness about diabetes and that it is necessary to promote best practices and behaviours when it comes to diabetes prevention and management.

References

References

1. The top 10 causes of death, Retrieved from http://www.who.int/news-room/fact-sheets/detail/the-top-10-causes-of-death on 26th October 2018
2. World Health Organization. (2016). Global report on diabetes. World Health Organization.
3. International Diabetes Federation. IDF Diabetes Atlas, 8th edn. Brussels, Belgium: International Diabetes Federation, 2017. http://www.diabetesatlas.org
4. Indian Council of Medical Research, Public Health Foundation of India and Institute for Health Metrics and Evaluation. India: Health of the Nation's States-The India State-level Disease Burden Initiative. New Delhi, India: ICMR, PHFI and IHME; 2017
5. Cheema, A., Adeloye, D., Sidhu, S., Sridhar, D., & Chan, K. Y. (2014). Urbanization and prevalence of type 2 diabetes in Southern Asia: A systematic analysis. Journal of global health, 4(1).
6. Fernandes, S. D., & Fernandes, S. D. (2017). Economic burden of diabetes mellitus and its socio-economic impact on household expenditure in an urban slum area. International Journal of Research in Medical Sciences, 5(5), 1808-1813.
7. Nceus, N. (2012). Report on conditions of work and promotion of livelihoods in the unorganised sector (No. id: 5124).
8. International Labour Organization. (2018). India Wage Report: Wage policies for decent work and inclusive growth
9. IDFC Foundation. (2014). India Infrastructure Report.
10. www
11. Kassahun, C. W., & Mekonen, A. G. (2017). Knowledge, attitude, practices and their associated factors towards diabetes mellitus among non-diabetes community members of Bale Zone administrative towns, South East Ethiopia. A cross-sectional study. PloS one, 12(2), e0170040.
12. Herath, H. M., Weerasinghe, N. P., Dias, H., & Weerarathna, T. P. (2017). Knowledge, attitude and practice related to diabetes mellitus among the general public in Galle district in Southern Sri Lanka: a pilot study. BMC public health, 17(1), 535.
13. Fatema, K., Hossain, S., Natasha, K., Chowdhury, H. A., Akter, J., Khan, T., & Ali, L. (2017). Knowledge attitude and practice regarding diabetes mellitus among Nondiabetic and diabetic study participants in Bangladesh. BMC public health, 17(1), 364.
14. Demaio, A. R., Otgontuya, D., de Courten, M., Bygbjerg, I. C., Enkhtuya, P., Oyunbileg, J., & Meyrowitsch, D. W. (2013). Exploring knowledge, attitudes and practices related to diabetes in Mongolia: a national population-based survey. BMC Public Health, 13(1), 236.
15. Rujul, D., Vadgama, P., & Parth, D. (2012). Effect of Awareness of diabetes on clinical outcomes of diabetes: An observational study at a private hospital in Gujarat. Education, 60(6), 7-5.
16. Shah, V. N., Kamdar, P. K., & Shah, N. (2009). Assessing the knowledge, attitudes and practice of type 2 diabetes among patients of Saurashtra region, Gujarat. International journal of diabetes in developing countries, 29(3), 118.
17. Raj, C. P., & Angadi, M. M. (2010). Hospital-based KAP study on diabetes in Bijapur, Karnataka. Indian J Med Spec, 1(2), 80-3.

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About United Way Mumbai

United Way Mumbai is part of the 130 year old United Way movement spanning 41 countries across the world

16 Years

Partnered with **400+ NGOs**, **300+** companies & **100,000+** individual donors

₹ **312+ Crores** for Community Development Programmes, Pan-India

UWM works in urban and rural communities through a collective community impact model. Our expertise lies in identifying, designing & implementing high impact projects in the following focus areas:

- Education
- Health
- Income
- Environment
- Public Safety
- Social Inclusion

UWM partners with corporates and is involved in designing of CSR policy and strategies, due diligence of NGO partners, programme implementation, employee volunteering, impact assessments and financial and programmatic reporting.

Our Mission

To improve lives by mobilising the caring power of communities to advance the common good.

CSR PARTNERSHIPS

Supporting companies in their philanthropy efforts to address social issues through directed corporate grants

WORKPLACE CAMPAIGNS

Engaging corporate employees through payroll giving programmes and volunteering activities

EVENT PARTNERSHIPS

The preferred philanthropy partner for corporate, sporting, social and cultural events, including the annual Mumbai Marathon

COMMUNITY IMPACT

High impact initiatives, specifically designed and implemented by UWM to solve community issues through collective action

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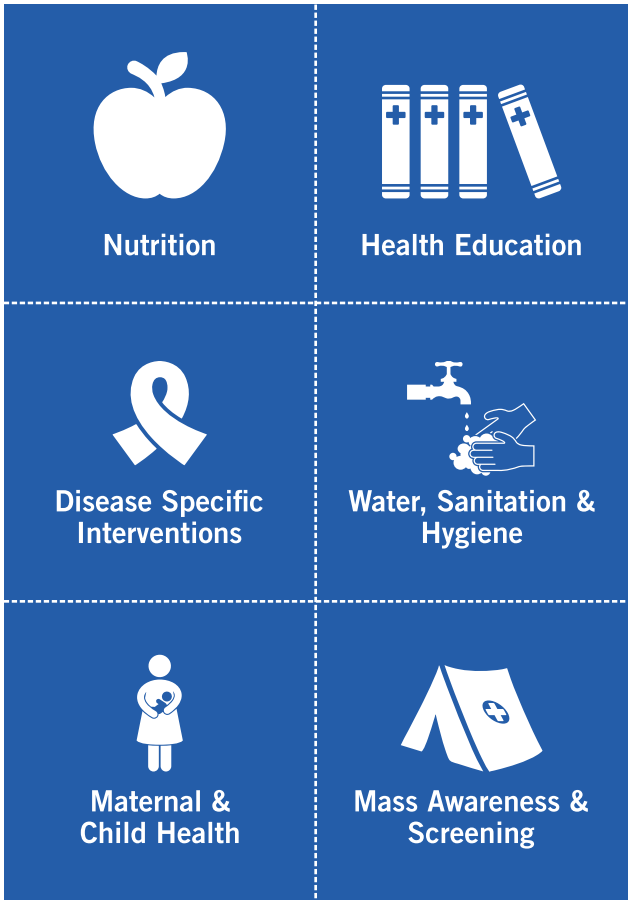
CSR Partnerships in Health

Healthcare for Underserved, At Risk Communities

UWM's model focuses on improving access and quality of healthcare for underserved communities while leveraging government resources and creating community ownership.

BUILDING HEALTHIER COMMUNITIES

Areas of focus



Nutrition

Nearly half of all deaths in children under 5 years are due to undernourishment.

A child who is malnourished has higher likelihood of premature death, greater susceptibility to illness, impaired brain development, lower IQ, poorer social skills and lowered capacity for work in adulthood.

Early intervention is therefore the key to address undernourishment and its related illnesses.

United Way Mumbai's strategy for nutrition includes-

- Partnerships with ICDS and Municipal Schools
- Nutrition Supplementation
- Nutrition Education for School Children
- Capacity Building of Parents, Teachers and ICDS Workers
- Medical Referrals for SAM and MAM cases
- Growth Monitoring

Ongoing Nutrition Projects: Alleviating Malnutrition in Rural Maharashtra (3050+ children), School Based Nutrition (1500 Children)

Health Education

Health education builds knowledge, skills, and positive attitudes about health. It teaches children and adults about physical, mental and emotional health. It motivates them to improve and maintain their health, prevent disease, and reduce risky behaviors.

Health education in schools helps students learn skills they will use to make healthy choices throughout their lifetime. Effective curricula result in positive changes in behavior that lower student risks around: alcohol, tobacco, and other drugs, injury prevention, mental and emotional health, nutrition, physical activity, prevention of diseases and sexuality and family life.

United Way Mumbai's strategy for health education includes-

- Development of child friendly pedagogy on health
- Health Education Sessions in Schools & Colleges
- Training of Peer Health Educators
- Community Education through Awareness Drives, Street Plays, IEC Campaigns, etc.

Ongoing Health Education Projects: SEHAT: Training 1500 school children for 3 years on health and hygiene

Disease Specific Interventions

United Way Mumbai has partnered with companies and NGOs to develop targeted interventions for specific diseases. These are diseases that either pose a critical and immediate threat to the community, or do not receive the attention and focus they need. Some examples of disease specific interventions are given below -

Hepatitis

Sensitization of communities, capacity building of healthcare professionals, testing and vaccination, IEC campaigns, training of peer health educators, counselling & education of pregnant women and women in child bearing age, patient support groups.

Impact: 7,00,000+ persons

Diabetes

Education, Early Diagnosis, Counselling, Medical Referral, Treatment Compliance, Citywide Awareness Generation

Impact: 2,00,000+ persons

Monsoon Ailments

Education, mass awareness and detection of mosquito breeding sites

Impact: 1,70,000 persons

Stroke

Training of Peer Health Educators, IEC Campaigns

Impact: 4,200 persons

Lung Cancer

Spreading awareness regarding the threat of lung cancer

Impact: 800+ persons

Water, Sanitation, Hygiene (WASH)

India is home to 594 million people defecating in the open, over 50 percent of the population. Only a quarter of the total population has clean drinking water on their premises. Poor Water, Sanitation & Hygiene causes diarrhoea, which is the second biggest cause of death in children under five. WASH therefore requires great attention. It is also one of the key focus areas of the Government of India's Swachh Bharat Mission.

United Way Mumbai's strategy on WASH includes -

- Infrastructure building through installation of toilets and water purification units
- Supporting WASH in disaster affected communities
- Distribution of health and hygiene kits
- Behaviour Change Communication for Health & Hygiene
- Training of students and peer health educators

Ongoing WASH Projects: Construction of 180 toilets, Behaviour Change Communication with 1500+ persons, Distribution of health and hygiene kits to 2000+ persons

Maternal & Child Health

Globally, 90% of the complications that lead to maternal deaths and two thirds of infant deaths are absolutely preventable. Lives of mothers and infants can be saved through evidence based, cost effective interventions. Safe pregnancy, motherhood and childhood are basic human rights as well as important indicators of a nation's social and economic progress.

United Way Mumbai's strategy for maternal and child health includes -

- Preventive health education for pregnant women and women in child bearing age
- Targeted medical interventions including general health check up and disease specific interventions to prevent mother to child transmission
- Prenatal and antenatal counselling and support
- Nutrition and medical support to prevent anemia
- Counselling and awareness generation on healthy practices
- Guidance for home based care for health and nutrition in first 1000 days of life

Ongoing Maternal & Child Health Projects: Interventions for Betterment of Health & Nutrition for Women and Children in Silvassa (1200 women and 300 children)

Mass Awareness, Screening & Health Camps

United Way Mumbai facilitates and implements mass awareness and screening drives to augment community health infrastructure. These drives are conducted with permissions from and in collaboration with government authorities and medical experts. They typically engage youth and corporate volunteers to reach out to larger numbers in a cost effective and sustainable manner.

Some of our initiatives towards mass awareness and screening include -

- Evening Clinics - Mobile Medical Unit for diagnostics, basic health care and medical referral services
- Periodic health camps catering to different demographics
- Awareness drives through training of peer health educators, street plays and door-to-door interactions on critical community health challenges
- Testing and Vaccination Camps

Recent Mass Awareness Projects: Youth for Healthy Mumbai, MCGM's Maha Arogya Abhiyaan

To know more and collaborate with UWM on health related projects, please write to **contact@unitedwaymumbai.org**

Report compiled by

United Way
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