The Role of Community Practices in Influencing the Incidences of Non-Communicable Diseases in Kinondoni Municipal Council, Dar Es Salaam

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ABSTRACT

This study conducted in Kinondoni Municipality investigated how community knowledge, attitudes, and practices (KAPs) influence the incidences of non-communicable diseases (NCDs). Using semi-structured questionnaires and in-depth interviews analyzed through statistical and thematic methods, the findings revealed low awareness of common NCDs, limited physical activity, and prevalent misconceptions and stigma that deter timely medical care. The study emphasized the important role of formal education and the urgent need for enhanced health education programs, public awareness campaigns, and community training to promote early prevention, healthy lifestyles, regular screenings, and correct misconceptions. Additionally, empowering individuals to monitor key health indicators and encouraging balanced nutrition, physical exercise, and reduced alcohol consumption are critical for reducing NCDs incidences and improving overall community health outcomes.

Keywords: Non-Communicable Diseases, Knowledge, Attitudes and Practices, Incidences

BACKGROUND OF THE STUDY

Non-Communicable Diseases (NCDs) are chronic conditions that are non-infectious and persist over long periods, characterized by complex causes, multiple risk factors, and significant functional impairments. The main types of NCDs include cardiovascular diseases, cancers, chronic respiratory diseases, and diabetes. Research indicates that the prevalence of NCDs and their risk factors varies significantly across sub-Saharan Africa, with stroke incidences ranging from 0.07% to 0.3%, diabetes from 0% to 16%, and hypertension from 6% to 48%. Increasingly, lifestyle factors such as urbanization, unhealthy diets, and sedentary behaviors are contributing to the rising burden of NCDs in Tanzania, which is projected to surpass that of communicable diseases within the next decade. This trend poses serious challenges for the healthcare system and exacerbates poverty, highlighting the urgent need for effective interventions and awareness campaigns to promote healthier lifestyles and reduce the incidence of NCDs in the community (Dalal *et al,* 2011; Naaz 2021; Ndumwa *et al.,* 2023; WHO,2023).

In Tanzania NCDs account for 34% of all deaths, with hypertension and cancers as the primary contributors. In 2018, NCDs were linked to 31% of premature deaths. There is a notable gap in promoting healthy lifestyles and preventive measures, as many individuals at risk are unaware of their health conditions; for instance, one-third of adults aged 25 to 64 are hypertensive, yet two-thirds do not know it, and only 35.4% of those diagnosed receive treatment. Despite the fact that most NCDs can be prevented through lifestyle changes and early detection, their prevalence continues to rise, placing additional pressure on the healthcare system. Limited awareness of NCDs causes and symptoms, along with negative attitudes and unhealthy behaviors, exacerbate this issue (Njiro *et al.*, 2023).

To effectively prevent and manage NCDs, it is essential to address gaps in KAPs. Although various awareness campaigns have been implemented, there is insufficient research on their effectiveness in changing KAPs.

Understanding current KAPs levels and identifying barriers can inform targeted public health strategies to combat NCDs.

METHODOLOGY

2.1 Study Area

The study was conducted in Kinondoni Municipal Council, one of five Municipalities in the Dar es Salaam Region of Tanzania, which has been identified as facing a significant increase in NCDs compared to other Municipalities. The research focused on three wards Wazo, Kunduchi, and Makumbusho selected for their large populations.

2.2 Research Design

Research design that was used for this specific study was cross sectional study design. It involved the collection of data at one point in time. This method provided a quick snapshot of the population, allowing researchers to gather data on various variables simultaneously. It was also less expensive and quicker to conduct, making them accessible to the researcher. It was also particularly useful for measuring the incidence of conditions, behaviors, or characteristics within a population, which can inform public health initiatives.

2.3 Research Approach

Mixed research approaches were used in this study. Qualitative approach involved the collection of information which captured the respondent's knowledge, attitude and practices on NCDs. Meanwhile, a quantitative approach was used for measurable numerical data.

2.4 Targeted Population

The study target population for this research encompassed adults ranging from 18 to 60 years of age. Using this representative sample it provided meaningful and correct information concerning this specific study. Four key informants were also involved in this study and they included the Municipal social welfare officer, Municipal medical doctor, Municipal community development officer, and the Municipal health officer**.**

2.5 Sample size and Sampling Technique

2.5.1 Sample size

By including representatives from local residents of these three representative wards, the study aimed to gather a diverse and comprehensive dataset to draw conclusions about the larger population of Kinondoni Municipal Council. The total population for the target population is 233,934.

The Cochran sample size formula for a known population is:

$$n = \frac{e^2}{1 + \frac{Z^2(P)(1-P)}{Ne^2}}$$

Where:

Cochran's sample size formula (1977)

For a known population

n=number of sample/sample size

N=total population 233934

$$n = \frac{(0.05)}{1 + \frac{1.96^2(0.5)(1-0.5)}{(233934 \times 0.05)^2}}$$

e=margin of error 0.05

p=sample population 0.5

z=value found in z score table 1.96

n=384

Reduction by 30% makes the sample size n=115

Sample size was reduced by 30% researchers may reduce sample size due to limitations in time, budget, or available participants, acknowledging that smaller samples still need justification regarding their informational value for the study's goals (Bolarinwa, 2020).

2.5.2 Sampling technique

The sampling technique that was used was simple random sampling and purposive sampling. Purposive sampling was used for getting the key informants and the representative wards from this specific Municipal and it included the Municipal health officer, Municipal social welfare officer, Municipal community development officer and the Municipal medical officer from this Municipal. Meanwhile for the respondents were the local residents simple random sampling was used.

2.6 Primary Data Collection

2.6.1 Questionnaire

This was one of the data collection methods and it helped to collect data intended from the local residents from the three chosen wards and it was in the form of closed and open-ended questions. The structured format of questionnaires allowed standardized data collection, organization, and analysis, making it especially useful for quantitative research.

2.6.2 In depth interviews

The study targeted adults aged 18 to 60 years to gather relevant and accurate information for the research. This representative sample ensured that the findings were meaningful. Additionally, four key informants contributed to the study, including the Municipal social welfare officer, the Municipal medical doctor, the Municipal community development officer, and the Municipal health officer.

2.7 Secondary data collection

2.7.1 Document reviews

This information was collected by reviewing other documented sources which were potential for this study. For this study different organization reports, government reports, survey reports, journals and research reports were used to enrich the data collected.

2.8 Data Analysis Methods

2.8.1 Qualitative data

In this research data was analyzed through thematic code analysis following the five stages establishing a meaningful pattern in the data (Braun & Clarke, 2022). In relation to the research objective there was

familiarization of data, generating initial codes, searching for themes among codes, reviewing the themes and presenting the results.

2.8.2 Quantitative data

The quantitative data was analyzed using Statistical Product for Social Solutions (SPSS) and presented using descriptive statistics.

2.9 Validity and Reliability of Data

2.9.1 Validity of data

Triangulation methods of data collection (questionnaires and in-depth interviews) were employed. This ensured that the collected information was valid by cross checking contradicting information. These instruments were also cross checked and reviewed by the supervisor to examine if they are relevant for data collection.

2.9.2 Reliability of data

To ensure the reliability of the research, consistent data collection methods were utilized, including standardized questionnaires and structured interview protocols. A pilot study was conducted in one of the selected wards prior to the main survey to refine the language used in the questionnaires and eliminate any ambiguities. Additionally, a Swahili version of the questionnaires was provided to enhance clarity and comprehension for the respondents.

3. Ethical Consideration

The permit was approved by the University of Iringa and the permission letter written to conduct the study was obtained from the office of the Municipal commissioner of Kinondoni Municipal Council. Written and verbal consent was also obtained from the study participants prior to the participation in the study. All collected information was kept confidential and was used only for the intended objectives of this specific study.

RESULTS AND DISCUSSIONS

4.1 Demographic Characteristics of Respondents

4.1.1 Sex of the respondents

Results (Table 1) indicates that out of 115 respondents, 54.6% of the respondents were male while 45.4% were female. The sex distribution in the study indicated that both male and female perspectives were effectively captured, although there was a slight predominance of male participants. Involving both sexes in KAPs studies related to NCDs significantly enhances community engagement and the effectiveness of health initiatives, as noted by WHO (2016). Since communities may respond differently to male and female health workers, balanced participation allows researchers to capture diverse perspectives and better understand community dynamics. This inclusive approach facilitates the development of targeted interventions tailored to the specific needs of both men and women, thereby addressing health disparities and promoting equitable healthcare. In the context of the Kinondoni Municipal Council, near-equal representation of sexes in the study strengthens the relevance and applicability of findings across the population, offering policymakers valuable socio-economic insights to design more effective, comprehensive strategies that improve overall community well-being.

Results (Table 2) also shows that there was a relationship between sex and awareness of the risk factors for developing NCDs. Of the respondents who claimed there was a relationship between sex and awareness of NCDs 48.3% (43) were females and 51.7% (46) were male who were aware of the risk factors for developing NCDs. The results show that there was a slight difference between males and females on the risk factors for developing NCDs.The results presented in Table 2 show a p-value of 0.04, which is below the commonly accepted significance threshold of 0.05. This statistically significant p-value suggests that there is a meaningful association between sex and awareness of NCDs and their risk factors. In other words, the data provide strong evidence that

differences in awareness levels regarding NCDs and their risk factors are related to the sex of the individuals, rather than occurring by random chance.

Findings were supported by the study done by Ithnin *et al*. (2020) which concluded that notably male respondents had better practice scores than their female counterparts indicating gender differences in health seeking behaviors and lifestyle choices. Hence underscored the need for gender sensitivity approaches to consider gender differences in KAPs to effectively address the specific needs of both men and women. Another study by Linda (2020) revealed that men's understanding of the effects of hypertension on individuals, families, and society can significantly encourage women's active participation in hypertension prevention and control efforts. This knowledge influences how people perceive the risk factors associated with hypertension and whether they adopt practices in their daily lives aimed at reducing the incidence of hypertension cases.

Table 2: Relationship between sex and awareness of NCDs and its risk factors (n=115)

Sex	No	Yes	%	Total	P Value
Female	8	43	44.35	51	0.04
Male	18	46	55.65	64	
Total	**26**	**89**	**100**	**115**	

Source: Researcher 2024

4.1.2 Respondents age group

Results (Table 1) indicates that the largest proportion of respondents (34.5%) were aged between 29-39 years, with other age groups more evenly distributed: 26.1% were aged between 18-29 years, 23.5% were aged between 40-49 years, and 16.0% were aged between 50-60 years. This diversity highlights the importance of considering varied experiences across age groups to fully understand community contributions to KAPs regarding NCDs. Consistent with Naaz (2021), young adults tend to have better knowledge of healthy lifestyles, though teenagers often still consume unhealthy foods despite awareness. Additionally, obese or overweight individuals may understand healthy behaviors but struggle to translate knowledge into practice, indicating a gap that requires targeted public health education tailored to different demographics through schools and community efforts. Supporting this, Alamnia *et al.* (2023) identify age over 29, family history, and obesity as significant predictors of NCDs, underscoring the necessity of including diverse age groups to inform early interventions, promote lifelong healthy habits, and develop policies addressing social determinants to effectively prevent NCDs in the Municipality. The age distribution of respondents in the Kinondoni Municipal Council study reflects a wide range of perspectives, with older individuals offering valuable insights on NCDs and younger participants contributing fresh knowledge, attitudes, and practices. However, the relatively low involvement of younger people may suggest less engagement with NCDs incidence in the community.

Cross-tabulation results (Table 3) highlight a distinct variation in awareness of major NCDs risk factors across different age groups. Specifically, the 29-39 age group demonstrated the highest level of awareness, suggesting that individuals in this younger adult cohort are comparatively more informed about the risks associated with NCDs. Conversely, both the 39-49 and 40-49 age groups showed significantly lower levels of awareness, indicating a concerning dip in knowledge among these middle-aged participants. This pattern points to a critical knowledge gap within the 39-49 age group, which may be influenced by factors such as lower exposure to health information or differing priorities. Addressing this gap through targeted health education and awareness campaigns tailored to this demographic could help improve their understanding and ultimately contribute to better prevention and management of NCDs in this population segment.

Table 3: Relationship between age and awareness of NCDs and its risk factors (n=115)

Age	**No**	**Yes**	**Total**	**%**	**P Value**
18-28	6	25	31	27	

29-39	10	29	39	34	
39-49	1	0	1	1	0.03
51-59	5	20	25	22	
60	4	15	19	16	
Total	**26**	**89**	**115**	**100**	

Source: Researcher 2024

The p-value of 0.03, as indicated from the data in Table 3, is less than the commonly used significance level of 0.05. Therefore, the data supports the conclusion that there is a significant relationship between age and awareness of NCDs and their risk factors, indicating that age influences such awareness in the studied population.

Table 1: Represents Social Demographic Characteristics of the Respondents (n=115)

Respondents	**Frequency (n)**	**Percent (%)**
Sex		
Male	65	54.6
Female	50	45.4
Total	**115**	**100**
Age		
18-28	31	26.1
29-39	41	34.5
40-49	24	23.5
50-60	19	16
Total	**115**	**100**
Education Level of the Respondent		
Primary level	13	10.9
Secondary level	34	28.6
College/vocational training	13	10.9
University	45	41.2
Didn't attend school	10	8.4
Total	**115**	**100**
Occupations of the respondents		
Employed	42	35.3
Not employed	32	26.9
Entrepreneur	41	37.8
Total	**115**	**100**

Source: Researcher 2024

4.1.3 Education level of the respondent

The results (Table 1) reveal that 41.2% of respondents had attained a university education, 28.6% completed secondary education, 10.9% had primary education, and another 10.9% underwent college or vocational training, while 8.4% had never attended school. This distribution indicates that most participants had surpassed foundational education, with many acquiring advanced academic qualifications or practical skills relevant to the workforce. The predominance of university-educated respondents enhances the credibility of the data, given

their likely advanced knowledge on NCDs. The diverse educational backgrounds represent a broad spectrum of perspectives, crucial for accurately evaluating the role of KAPs in NCDs incidence within Kinondoni Municipal Council. These findings align with Oshio and Kan (2019), who demonstrated that educational level is a significant predictor of NCDs incidence among middle-aged individuals, highlighting education's impact on health outcomes through a hazards-model analysis. This underscores the critical need for targeted public health interventions to reduce health inequalities. Overall, the study emphasizes formal education's vital role in shaping KAPs related to NCDs and suggests that enhancing educational initiatives focused on healthy lifestyles can close knowledge gaps, empowering individuals toward better health management.

Cross-tabulation from Table 4 showed that awareness of NCDs and their risk factors was highest among university graduates (38 aware, 14 unaware), followed by college-trained respondents (10 aware, 1 unaware) and those with secondary education (30 aware, 3 unaware). Awareness was notably lower among respondents with only primary education (7 aware, 6 unaware) and those who did not attend school (8 aware, 2 unaware). These findings suggest a positive correlation between higher education levels and NCDs awareness, emphasizing the importance of educational attainment in health knowledge dissemination.

The results presented in Table 4 demonstrate a p-value of 0.02, indicating a statistically significant relationship between the level of education and awareness of NCDs and their risk factors. This significance suggests that the likelihood of this association occurring by chance is very low, reinforcing the validity of the finding. Specifically, the data reveal that individuals with higher educational attainment, particularly those with university-level education, show greater awareness of NCDs and their associated risks. This underscores the important role that advanced education plays in enhancing health knowledge, which can contribute to improved preventive behaviors and health outcomes within the population.

Table 4: Relationship between level of education and the awareness of NCDs and its risk factors (n=115)

Level of Education	No	Yes	Total	%	P Value
Didn't attend school	2	8	10	9	
Primary	6	7	13	11	
Secondary	3	30	33	29	0.02
College/Vocational training	1	10	11	9	
University	14	34	48	42	
Total	**26**	**89**	**115**	**100**	

Source: Researcher 2024

4.1.4 Occupations of the respondents

Results (Table 1) revealed that 37.8% of the respondents were entrepreneurs, 35.3% employed and 26.9% were unemployed. This question was significant as research indicated that the respondents work status can influence their perspectives and experiences related to their occupations. Cross-tabulation results from Table 5 showed variation in awareness of NCDs and their risk factors across employment statuses among the 115 respondents. Among the 40 employed individuals, 30 reported being aware of NCDs and their risks, while 10 were not. Among the 43 entrepreneurs, a higher proportion 35 respondents were aware, with only 8 unaware. Of the 32 unemployed participants, 24 were aware of NCDs and their risk factors, and 8 were not. These findings suggest that awareness levels are generally higher among entrepreneurs and employed individuals compared to the unemployed, indicating that employment status may influence knowledge of NCDs and highlighting the need for targeted awareness efforts for unemployed populations.

The study's results align with findings from Tipayamongkholgul *et al*. (2021), which identified higher NCDs risks among informal workers in physically demanding or irregular-hour occupations, with males facing elevated risks for cardiovascular diseases and hypertension linked to smoking and alcohol use, while females had a 20%

greater risk for diabetes, reflecting gender-specific occupational and lifestyle stressors. Similarly, Sekoni (2013) found that although banking sector workers in Lagos exhibited positive attitudes toward healthy living, their knowledge and actual healthy practices were lacking, underscoring a gap between awareness and behavior. Collectively, these studies emphasize that occupation significantly influences NCDs risk through lifestyle, stress, and socioeconomic factors. Addressing these occupational hazards with targeted health promotion, improved working conditions, and supportive policies is vital to reducing NCDs incidence and enhancing public health outcomes in Kinondoni Municipal Council and beyond.

Table 5: Relationship between occupation and the awareness of NCDs and its risk factors (n=115)

Occupation	No	Yes	Total	%	P Value
Employed	10	30	40	35	
Entrepreneur	8	35	43	37	0.04
Not employed	8	24	32	28	
Total	**26**	**89**	**115**	**100**	

Source: Researcher 2024

Results (Table 5) shows p-value of 0.04 being less than the commonly accepted significance threshold of 0.05, indicating a statistically significant relationship between occupation and awareness of NCDs and their risk factors in this data set. This means that the observed association is unlikely to have occurred by chance, reinforcing the conclusion that occupation plays an important role in influencing individuals' awareness levels regarding NCDs. Consequently, occupation appears to significantly affect how informed people are about NCDs and their risks, suggesting that differences in job status or work environments may impact exposure to health information. This finding highlights the importance of tailoring public health education and awareness programs to various occupational groups to enhance knowledge and promote preventive behaviors effectively.

4.2 The role of Community Practices in influencing the Incidences of NCDs

Under this objective, the researcher aimed to assess the role of community practices in influencing the incidences of NCDs in Kinondoni Municipal Council, with the goal of increasing health awareness in the community and improving overall health status. To achieve this, the researcher presented several key statements, encouraging respondents to express their views by indicating their agreement or disagreement with each statement.

4.2.1 Respondents' physical activity engagement

Results (Table 6) showed how often these community members engaged in physical activity (e.g. walking, exercising, and sports) for at least 30 minutes per day. The study findings revealed that 37.8% of respondents indicated they sometimes engage in physical activity for this duration, while 28.6% reported that they rarely do so. Additionally, 15.1% of respondents stated they never engage in physical activity and 18.5% engaged in physical activity on a daily basis. This suggests that many respondents engaged in physical activity only occasionally. The results illustrated the frequency of physical activity among community members, specifically regarding their engagement in activities such as walking, exercising, and sports for at least 30 minutes each day. Overall results highlighted a mixed pattern of physical activity within the community, with a substantial number of individuals falling short of recommended activity levels, which may have implications for public health initiatives aimed at promoting regular exercise and improving overall health outcomes.

Table 6: Respondents' physical activity engagement (n=115)

Responses	Frequency(n)	Percent (%)
Sometimes engage in physical activity for this duration	43	37.8
Reported that they rarely do so	31	28.6

Never engage in physical activity	17	15.1
Engage in physical activity for at least 30 minutes per day	13	10.9
Always engage in physical activity	11	7.6
Total	**115**	**100**

Source: Researcher 2024

Key informants identified several strategies to enhance community engagement in the prevention and management of NCDs in Kinondoni Municipal Council. The following are what two key informants had to say

A social welfare officer from Kinondoni Municipal Council reported in September 2024 that community members have shown increased engagement in NCDs prevention efforts. Key improvements include. Higher participation in health fairs and screening programs for early detection of conditions like hypertension, diabetes, and cancer. Greater focus on maintaining balanced diets, regular physical activity, and healthy weight management. Improved access to healthcare services, including preventive care and counseling.

There is also a growing awareness of the importance of regular physical activity, with patients encouraged to engage in at least 150 minutes of moderate exercise weekly. Additionally, patients are actively seeking information about their health and engaging in discussions about their treatment plans, demonstrating a commitment to managing their health (Medical Doctor in Kinondoni Municipal Council, September, 2024).

Implementing lifestyle modification programs in community settings can greatly enhance physical activity and dietary behaviors, which are critical modifiable risk factors for NCDs. Integrating NCDs policies into urban planning such as restricting unhealthy food availability and designing environments that encourage exercise is essential to support healthier choices.

The impact of aggressive fast-food marketing further underscores the need for incentives that promote healthy behaviors, as supported by recent literature (Kabalamu *et al.,* 2020; Naaz, 2021; Pallangyo *et al.*, 2024). Despite health care providers acknowledging the benefits of physical activity, about 87% remain insufficiently active due to barriers like time constraints and lack of facilities, highlighting the need for targeted interventions, including embedding exercise into medical education and workplace culture. The study stresses the critical role of behavior change and community education in addressing NCDs risk factors, linking higher educational attainment to better health knowledge (Naum *et al.*, 2020; Bako *et al.,* 2021; Naaz, 2021). Focusing on urban areas like Kinondoni Municipal Council, the findings advocate for community-driven physical activity promotion to improve public health outcomes, reduce healthcare costs, and counteract sedentary lifestyles through early and sustained behavioral change initiatives.

4.2.2 Respondents' dietary habits

Results Table 7 revealed that 39.5% of respondents reported consuming fruits and vegetables 1-2 times per week, while 37.8% indicated they consume them 3-4 times per week. Additionally, 14.3% of respondents stated they eat fruits and vegetables once daily, and 10.9% reported consuming them more than once a day. A smaller portion, 8.4%, claimed they never consume fruits and vegetables. These results suggest that the majority of respondents consume fruits and vegetables primarily 1-2 times per week in their daily diet.

Table 7: Respondents' Dietary Habits n= (115)

Responses	**Frequency (n)**	**Percent (%)**
Never consume fruits and vegetables	10	8.4
Consume fruits and vegetables 1-2 times per week	45	39.5
Consume fruits and vegetables 3-4 times per week	43	37.8

Consume fruits and vegetables once a day	16	14.3
Consume fruits and vegetables more than once a day	42	10.9
Total	**115**	**100**

Source: Researcher 2024

The findings from key informants indicate that enhancing understanding and practices related to NCDs requires the implementation of regular educational programs through workshops and community events focused on risk factors, prevention methods, and management techniques. Engaging community leaders and influencers can further promote healthy practices and raise awareness. Organizing community health fairs that offer free or low-cost screenings can facilitate early detection and management of prevalent NCDs.

"As a strategy to reduce NCDs there has been an increased emphasis on maintaining balanced diets, regular physical activity, and healthy weight management in my community."(Social welfare Officer Kinondoni Municipal Council, September, 2024).

"My patients are actively seeking information about their health and engaging in discussions about their proper diets, treatment plans, demonstrating a commitment to managing their health." (Medical Doctor Kinondoni Municipal Council, September, 2024).

This research is consistent with recent studies that highlight urban-rural disparities in dietary habits and knowledge related to NCDs. Despite better dietary practices in some areas, there is a significant lack of understanding regarding NCD risks, indicating a need for improved educational initiatives (Shuva *et al.,* 2022). Emphasizing a life course approach to healthy eating, from childhood to old age, is crucial for reducing the burden of NCDs (Curioni *et al.,* 2022). Additionally, middle-aged and older adults in Southwest China exhibit a gap in healthy diet knowledge, showing relatively low awareness but positive attitudes towards healthy eating (Fu *et al*., 2024). Collectively, these studies highlight the urgent need for targeted public health initiatives that promote awareness of healthy eating, address socio-economic factors affecting dietary choices, and enhance NCDs prevention and control efforts, particularly in rural areas and among older adults.

This study underscores the significance of maintaining healthy dietary habits throughout life to prevent and manage NCDs in Kinondoni Municipal Council. It emphasizes the critical role of obesity prevention during childhood and the establishment of healthy behaviors in adolescence. The research identifies unhealthy diets, characterized by low consumption of fruits, vegetables, and whole grains, alongside high intake of ultra-processed foods, as significant contributors to NCDs. It stresses that a nutritious diet at all life stages is essential for preventing these diseases. The study recommends that public health initiatives prioritize nutrition education and promote healthy dietary choices to cultivate a healthier community and mitigate chronic disease risks.

4.2.3 Respondents' smoking habits

Results (Table 8) indicate diverse smoking habits among respondents in Kinondoni Municipal Council. A majority (56.3%) have never smoked or used tobacco products, reflecting a strong culture of abstinence. Additionally, 18.5% are occasional users, and 17.6% have successfully quit smoking, while only 7.6% report regular tobacco use. These findings suggest that the community is generally averse to tobacco, with more than half abstaining and a notable number having quit. However, the existence of both occasional and regular users highlights the continued need for tobacco cessation programs and prevention strategies in the area. Overall, while most community members avoid tobacco, targeted interventions could help further decrease its prevalence

Table 8: Respondents' Smoking habits n= (115)

Responses	**Frequency (n)**	**Percent (%)**
Yes, regularly	9	7.6
Yes, occasionally	21	18.5

No, I quit	20	17.6
No, I never smoked	50	56.3
Total	**115**	**100**

Source: Researcher 2024

The study by Wang *et al.* (2022) examines the relationship between smoking and NCDs, surveying 1,104 current smokers, predominantly male (82.8%) with an average age of 43.6 years. About 22% reported having at least one NCDs, with 17.8% suffering from non-respiratory and 6.6% from respiratory conditions. Notably, 41.8% expressed a desire to quit smoking, particularly among those with NCDs, as logistic regression indicated that smokers with NCDs were 1.3 times more likely to intend to quit than those without. Additionally, Mishra *et al.* (2022) found that 15.9% of women had at least one NCDs, with a small percentage engaging in tobacco use and alcohol consumption, which significantly increased their NCDs risk. These findings highlight smoking as a major modifiable risk factor for NCDs and emphasize the need for targeted public health strategies focused on tobacco control and education to mitigate the health burden associated with these diseases.

Results from this study indicated that the majority of residents in the Kinondoni Municipal Council do not engage in smoking or the use of tobacco products. This is a positive sign, as smoking is a well-known risk factor for developing NCDs. It is important to maintain and promote this trend to further reduce the risk of NCDs in the community.

4.2.4 Respondents' alcohol consumption habits

Results (Table 9) indicate diverse alcohol consumption patterns among respondents. Approximately 31.9% reported drinking alcoholic beverages 1-2 times a week, while 31.1% consume alcohol infrequently during the week. Additionally, 22.7% stated they never drink alcohol, and 10.9% indicated they drink 3-4 times a week. A smaller segment, 8.4%, reported daily alcohol consumption. Overall, these findings suggest that the majority of respondents primarily consume alcohol on a weekly basis, specifically 1-2 times per week.

Table 9: Respondents' alcohol consumption habits n= (115)

Responses	**Frequency (n)**	**Percent (%)**
Never	26	22.7
Rarely	36	31.1
1-2 times per week	37	31.9
3-4 times per week	13	10.9
Daily	5	8.4
Total	**115**	**100**

Source: Researcher 2024

4.2.5 Respondents' health screenings habits

Results Table 10 reveal that 52.9% of respondents had not participated in any health screenings or check-ups in the past year. In contrast, 32.8% reported having had screenings or check-ups once or twice during this period, while 11.6% indicated they had undergone screenings or check-ups three to four times. Only a small fraction, 2.7%, reported having had more than four screenings or check-ups in the past year. These findings suggest that the majority of respondents did not engage in health screenings or check-ups over the last year. The study by Parry *et al.* (2011) indicates that alcohol consumption contributes to 3.4% of global NCD-related deaths, with significant impacts on cancer and liver cirrhosis, particularly in former Soviet Union countries. This highlights the strong link between alcohol use and various NCDs, including cardiovascular diseases and diabetes,

supporting the WHO call for evidence-based strategies to mitigate harmful drinking. In contrast, Jakkaew *et al*. (2019) found that a majority of women (40%) were never drinkers, while 39% were occasional light drinkers; these figures were notably lower for men. The study also revealed that alcohol consumption, along with other risk factors like a sedentary lifestyle and poor diet, significantly increased the odds of developing NCDs such as high cholesterol and hypertension among occasional heavy drinkers. Together, these studies underscore the need for targeted public health interventions focused on reducing alcohol consumption and promoting healthier lifestyle choices to combat the rising burden of NCDs. Alcohol consumption has a detrimental impact on various cardiovascular outcomes, including hypertension, hemorrhagic stroke, and atrial fibrillation, though the relationship can be complex for some conditions. It is also associated with several liver diseases, such as fatty liver disease, alcoholic hepatitis, and cirrhosis, as well as pancreatitis. In Kinondoni Municipal Council, the prevalence of alcohol consumption increases the risk of developing NCDs. Consequently, interventions focused on enhancing KAPs related to alcohol consumption are crucial for reducing NCDs incidence in this community.

Table 10: Respondents' responses on regular checkups of NCDs n= (115)

Responses	**Frequency (n)**	**Percent (%)**
No, I have not	60	52.9
Yes, 1-2 times	38	32.8
Yes, 3-4 times	13	11.6
Yes, more than 4 times	4	2.7
Total	**115**	**100**

Source: Researcher 2024

It was also examined how often respondents monitor their blood pressure and blood sugar. According to (Table 11) the study findings revealed that 33.6% of respondents indicated that they never monitor these health indicators, while 31.9% reported doing so rarely. Additionally, 26.1% stated that they sometimes monitor their blood pressure or blood sugar and a small portion, 8.4%, indicated that they often monitor these metrics. These results imply that the majority of respondents do not regularly monitor their blood pressure or blood sugar.

Table 11: Respondents' Responses on Monitoring of Blood Pressure and Blood Sugar n=(115)

Responses	**Frequency (n)**	**Percent (%)**
Never	39	33.6
Rarely	37	31.9
Sometimes	30	26.1
Often	9	8.4
Total	**115**	**100**

Source: Researcher 2024

On the other hand, findings from key informants indicate that community members are actively engaging in preventive measures, such as participating in health fairs and screening programs aimed at the early detection of conditions like hypertension, diabetes, and cancer. There is also a growing emphasis on maintaining balanced diets, engaging in regular physical activity, and managing healthy weights. Efforts are underway to promote responsible drinking habits and reduce alcohol consumption through community outreach initiatives. Furthermore, access to healthcare services including preventive care and counseling has improved to support healthier lifestyle choices

"Community members engage in preventive measures such as participating in health fairs and screening

programs for early detection of conditions like hypertension, diabetes, and cancer" (Social welfare Officer Kinondoni Municipal Council, September, 2024).

"Participation in health education programs among the community members has increased leading to the raising of awareness about risk factors and promoting healthy lifestyles, including balanced diets and regular exercise. Community events, such as sports festivals and health fairs, have also encouraged participation and fostered a culture of wellness. Many individuals also utilize screening services provided during initiatives like NCDs Week" (Community development officer Kinondoni Municipal Council, September, 2024).

"Patients are increasingly participating in routine check-ups to monitor vital health indicators like blood pressure, cholesterol, and blood glucose, which aid in the early detection of NCDs." (Medical Doctor Kinondoni Municipal Council, September, 2024).

Additionally, a lack of understanding about what constitutes a healthy lifestyle and its benefits can prevent individuals from making informed choices. Financial constraints may make healthy foods, gym memberships, and healthcare services less accessible. Furthermore, traditional beliefs and practices can sometimes promote specific diets or lifestyles that contradict health recommendations. Moreover, busy schedules and time limitations often lead individuals to choose convenient but unhealthy food options while neglecting physical activity.

"I observe several barriers that prevent people from adopting healthy lifestyle practices. Key obstacles include a lack of time and motivation, which often stem from busy schedules and competing priorities. Financial constraints also play a significant role, as many individuals find healthy foods too expensive or inaccessible." (Community Development Officer Kinondoni Municipal Council, September, 2024).

The study by Njiro *et al.* (2023) highlights effective community health initiatives that leveraged media outreach and local advocacy to enhance disease prevention, including health service exhibitions that offered screenings for hypertension, diabetes, and obesity. In 2020, targeted screenings revealed that 10% of individuals had at least one NCDs, with a third of those screened being newly diagnosed with hypertension by 2021. Furthermore, scientific conferences during NCDs Week facilitated discussions among stakeholders on strategies to mitigate the impact of NCDs, positively influencing health screening behaviors in the community. Similarly, research by Ciancio *et al.* (2020) showed that population health screenings for high blood pressure significantly decreased hypertension rates over four years among participants who received referral letters after initial screenings, leading to improved blood pressure and mental health outcomes. These findings underscore the effectiveness of community-based health screenings as a cost-effective strategy for reducing the burden of NCDs in low-income countries and highlight the necessity for further research to optimize such interventions. NCDs Week has proven to be a vital initiative in promoting NCD prevention and control, raising awareness, encouraging healthy lifestyles, and facilitating regular health screenings through a collaborative approach among various stakeholders, ultimately improving health screening behaviors in Kinondoni Municipal Council.

CONCLUSION

The findings of this study emphasize the vital role of formal education in shaping individuals' KAPs regarding health, highlighting the need for enhanced educational programs focused on healthy lifestyle choices and disease prevention from credible sources. While current awareness of NCDs is considered satisfactory, there is a pressing need to promote prevention from an early age, encourage healthy behaviors, support early detection through screenings, and strengthen community involvement. Participants in the study exhibited stigma and misconceptions about NCDs, associating them with employed individuals and urban areas, and mistakenly believing they are contagious or can be treated with local herbs. These misconceptions hinder timely medical consultations due to feelings of shame or fear of judgment, particularly in areas with limited healthcare access, which can lead to lower survival rates. To improve health outcomes, it is essential to address these issues through targeted public health campaigns that educate communities about NCDs and dispel myths. Promoting accurate information and fostering open discussions can reduce stigma and increase participation in preventive health measures, leading to earlier diagnoses and better treatment outcomes. Additionally, while community members have shown increased engagement in physical activities, health fairs, and screening programs, and generally

maintain good dietary habits, alcohol consumption remains a concern. Emphasizing healthy practices is crucial for reducing the incidence of NCDs, making it important for community members to adopt healthier lifestyles for improved health outcomes.

RECOMMENDATIONS

There is a need for increased efforts to enhance essential skills within the community through training programs and seminars aimed at raising awareness of NCDs. These initiatives will empower individuals to effectively monitor their blood pressure, blood sugar levels, and other vital health indicators. By providing the necessary education and resources, community members can proactively manage their health and make informed decisions, ultimately reducing the incidence of NCDs. Educators should also focus on dispelling stigma and misconceptions surrounding NCDs, fostering a more positive outlook that encourages individuals to recognize their vulnerability and take preventive measures or seek appropriate care if needed. Additionally, the government should facilitate effective health screenings and launch comprehensive awareness campaigns to promote healthier attitudes toward NCDs. By improving public knowledge about the risks associated with alcohol and other lifestyle choices, these initiatives can encourage a more proactive approach to health. Furthermore, individuals are encouraged to adopt practices that support their well-being, such as regular physical exercise, a balanced diet, and adherence to recommended health strategies. Establishing health-focused programs can provide crucial education and resources to inspire these positive changes, ultimately helping to reduce the incidence of NCDs in the community.

Areas for further study

The research recommends several areas for further study to enhance NCDs prevention and management. These include investigating the effectiveness of community awareness initiatives and media campaigns on changing perceptions and behaviors, as well as evaluating the integration of NCDs education in school curricula to promote healthy lifestyles among adolescents. It is also important to explore barriers to timely medical care, such as cultural stigma, transportation, and financial constraints, alongside assessing the knowledge, attitudes, and practices of health extension workers to improve their training and community education roles. Further research should assess lifestyle intervention programs targeting obesity and physical activity among youth and examine how well NCDs services are integrated into primary healthcare, with attention to screening and treatment accessibility. Lastly, studies should focus on enhancing community participation through collaboration with local organizations and conducting longitudinal assessments of knowledge, attitudes, and practices related to NCDs over time.

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