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RESEARCH ARTICLE

PREVALENCE AND FACTORS ASSOCIATED WITH ROUTINE MEDICAL CHECKUP AMONG PATIENTS ATTENDING MASAKA REGIONAL REFERRAL HOSPITAL, UGANDA

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Abstract

Globally, Routine Medical checkup is known to be a preventive medicine that opens doors for assessment of well-being status of all individual and decreases the mortality and morbidity of different ailments in communities. attending health checkups may be one of the key reasons of controlling the predisposition and cause of much of the illness, suffering and early death related to chronic illnesses and condition. It's on this ground that this current study sought to elucidate further on factors determining the adherence of people to medical checkups. A descriptive cross-sectional study was carried out among 385 adult respondents attending Masaka regional referral hospital, in Uganda. A structured questionnaire involving open-ended and close-ended questionnaire was used and data was analyzed using SPSS version 26. Overall, 61.3% of study participants have ever heard of routine health check-ups citing hospitals (25.7%) as the most used source of the information. A prevalence of 43.4% represents the percentage of those who do routine health check-up and of which majority engage in only a general examination (14.5%). Overall, more than half of the respondents (56.6%) have never participated in routine health check-ups with their reported reasons of not feeling sick (25.97%). Factors like level of education, Employment, Occupational, exercise practices and level of awareness was statistically significant to uptake of routine heath checkup among the respondent at P< (0.005). Low health check-up rates may translate into inability to detect and intervene with early health challenges among respondents, and this is whereeffort is needed in ensuring that routine health check-up is encouraged especially during times when patients are healthy. There is need to strengthen government efforts and other concerned NGOs to put across specific sensitization programs about routine health check-ups on different media platforms and also utilize other social public means.

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Introduction:-

Globally, Routine checkup is known to be a preventive medicine that opens doors for assessment of well-being status of all individual and to decrease the mortality and morbidity of different ailments in communities [1]. Routine health checkup is an approach of general and preventive health checks which include a physical examination and/or an assessment of demographic and lifestyle risk factors which assess an individual's current health or predict their chance of developing illness in the future. Routine health check-ups are important for the early identification of risk factors for many non-communicable diseases such as heart disease, diabetes and stroke, also some communicable diseases such as Hepatitis B as evidenced in a study carried out by Vilibic-Cavlek and his colleague in Croatian adult undergoing routine check-up [2]

In low-income country which Uganda is inclusive, the practices of routine medical checkup are poor and very low uptake of the services, despite alarming rate and steady increase of the burden of chronic and non-communicable diseases in the region [3]. A study in Ghana by Agbokey et al., was also evident that patients delayed in seeking proper medical attention during illness and some even believe in self-medication by considering both biomedical herbs and traditional herbs [4]. Factors that are non-modifiable like age and family history of some diseases determine the checkup or screening one requires. Likewise, the modifiable risk factors like alcohol consumption smoking, unhealthy life style like physical inactivity, unhealthy diet and sedentary lifestyle are all keys in determining the frequency of checkup [5].

In several health care systems in Uganda, routine health checkups have always been carried out for primary prevention of Non-Communicable Diseases (NCDs) or chronic illness, identification of high-risk individuals, increasing chances for treatment and cure, limit risk of complications by closely monitoring existing conditions, form a good partnership with the doctor to ensure efficient treatment and also get updated on new medical information or technologies that are available [6]. Interventions have been done before by different stakeholders like ministry of health, NGOs to sensitize people's awareness on RMC which include; health awareness camps in communities, guidelines on diet and physical activity, community, work place and School health programs, regular health education on NCDs, sensitization on NCDs through RHC, sports events and inter-school competitions, regular screening exercises for NCDs, training of health care workers of various cadres on NCDs and their management, establishing and supporting NCD Clinics, regional referral hospitals and some health centers to diagnose and manage NCDs and their complications [7]. But despite the interventions, there is still a rise in the prevalence of communicable and non-communicable diseases in Uganda and this could bepoor adherence to routine health checkups among the populations which also increase the burden of suffering from the major preventable diseases. however, proper uptake of routine health checkup will provide healthcare practitioner with detection and proper diagnosis of diseases that will reduce socioeconomic burdens for the patients and the entire communities [8].

Based on the reviewed literature, it's evident that low attendance of routine health checkups has been investigated to a limited extent with no proper documentations of clear statistical data and most study have not actually highlighted reasons why people should attend routine health checkups in the different communities in Uganda. Hence drawing a conclusion that attending health checkups may be one of the key reasons of controlling the predisposition and causes of much of the illness, suffering and early death related to chronic illnesses and condition.It's on this ground that this current study sought to elucidate further on factors determining the adherence of people to health checkups.

Methodology:-

Study design

The study was a cross sectional study from a population-based survey for period of 8 weeks.

Study area

This current study was conducted among the community people attending Masaka regional referral hospital during the period of this study. Masaka regional referral hospital is located in the central business district of the town of Masaka, approximately132 kilometers (82 miles), by road, and southwest of Kampala, Uganda's capital and largest city. According to the 2014 census data, Masaka Hospital serves a population of 297,004 in Masaka district, males (50.456%) and females (49.544%) [9]. The hospital offers both general and specialized services and is a teaching hospital with an annual admission of 23,456 patients. The study was carried out among adults in the age group of 18-65 years.

Sample size

The size of the population and the amount of error the researchers are willing to tolerate is what determines the size of the sample. This current research was conducted within a 95 percent of certainty, a sample size of 385 was considered based on assumption guiding the ample size determination.[10]

The formula used to obtain the sample size is:

$N = \frac{Z^2 Pq}{d^2}$

- Where n = sample size
  z = z value corresponding to a 95% level of significance
  p = expected proportion of population had routine medical

Check-up = 48.2% =0.482 (Dr Olayinka et al. 2015)

q = (1 - p) = (1-0.482) = 0.518

d = absoluteprecision (5%)

Sampling procedure

Simple random sampling was applied in selection of the sample size, numbers were given to individuals in the sampling frame, then the random number table was used to pick the sample.

Data collection and analysis

The data will largely be obtained using open-ended and close-ended questionnaire, relating to the research topic, and it will be translated to three languages i.e. English and Luganda for convenience of the participants. Information collected from the respondents was entered and analyzed with Statistical Package for Social Sciences (SPSS) version 26 software. Frequencies and charts were used to summarize variables of interest for descriptive statistics and bivariate analysis.

Ethical considerations

Permission was sought from the administration of the health facility with the aid of an introductory letter from the Dean of Habib medical school, Islamic university in Uganda.All the participant was provided with adequate explanation of the purpose of the study and they were requested thereafter to consent prior to the interviews and the questionnaires that was provided.

Results:-

Table 1 presents the demographic characteristics of the study respondents were among the total 385 participants majority 117(30.4%) are between the age of 26-33 years and the least age group 68(17.7%) are those who fall between 42 years and above, relatively half of the respondents 194 (50.4%) were males with which 173(44.9%) of them were married and majority 244(63.4%) were Christians. Regarding the level of education majority 145(37.7%) of the respondents had primary education (refer to chart 1), two-third of the respondents 260(67.5%) reported being from Muganda ethnic group and of which majority 178(46.2%) and 155(40.3%) of them are farmers and full-time employee respectively.

Table 1:- Demographic Characteristics of the study respondents.

Variables	Frequency (N=385)	Percentage (%)
Age of respondents (years):		
• 18-25	99	25.7
• 26-33	117	30.4
• 34-41	101	26.2
• 42 and above	68	17.7
Gender:		
• Male	194	50.4
• Female	191	49.6
Marital status:		
• Married	173	44.9
• Single	100	26.0
• Divorced	30	7.8
• Separated	35	9.1

• Cohabiting	28	7.3
• Widow	19	4.9
Religion:		
• Muslim	133	34.5
• Christian	244	63.4
• Others	8	2.1
Ethnic group:		
• Muganda	260	67.5
• Munyankole	83	21.6
• Others	42	10.9
Occupation:		
• Civil servant	52	13.5
• Farmer	178	46.2
• Trader	93	24.2
• Others	62	16.1
Employment status:		
• Full-time employee	155	40.3
• Partial-time employee	76	19.7
• Student part-time employee	14	3.6
• Temporary worker	67	17.4
• Contract worker	18	4.7
• Others	55	14.3

Findings from this study regarding the respondent's lifestyle behavioral factors showed that the majority of the respondents 220(57.1%) do not habitually perform exercise and three-quarters of the total respondents 290/385 (75.3%) have never smoked whereas just less than half of the respondents 158(41.0%) reported having ever taken any form of alcohol as shown in Table 2.

Table 2:- Respondentslifestyle factors(N=385).

Statements for consideration	Yes	No
Do you perform exercise?	165 (42.9%)	220 (57.1%)
Have you ever smoked?	95 (24.7%)	290 (75.3%)
Have you ever taken any form of alcohol?	158 (41.0%)	227 (59.0%)

The uptake of routine health checkups among respondents in this study is demonstrated in table 3 below where it can be seen that the majority of the study participants 236(61.3%) have ever heard of routine health check-ups citing hospitals 99(25.7%) as the most used source of the information (refer to chart 3). More than half of the respondents 218(56.6%) have never participated in routine health check-ups with their reported reasons 100(26.0%) being that they are not feeling sick (see chart 4) and just 56 of the total 385 (14.5%) respondents participated in the general examination and most of them 55(14.3%) do not know how often they go for a routine health check-up. However, majority 330(85.7%) do believe that routine health check-up is necessary for improving good health of an individual and at the same time more than three-quarters of the total respondents 296(76.9%) have ever been previously admitted in the hospital.

Table 4:- Respondents uptake of Routine Health Check Ups.

Statements for consideration	Frequency (N=385)	Percentage (%)
Have you ever heard of Routine health check-ups?		
• Yes	236	61.3
• No	149	38.7

If yes, who was the source of the information?		
• Family	31	8.1
• Friend	56	14.5
• Hospital	99	25.7
• Mass media	36	9.4
• Others	14	3.6
• Not applicable	149	38.7
Have you ever participated in routine health check-ups?		
• Yes	167	43.4
• No	218	56.6
If yes, which one?		
• General Examination	56	14.5
• Blood pressure	28	7.3
• Visual check-up	5	1.3
• Dental check	5	1.3
• Blood sugar	12	3.1
• Cervical Cancer Screening	7	1.8
• Others		
• Not applicable	54	14.0
	218	56.6
How often do you go for routine health Check-up		
• Monthly	18	4.7
• Every 6 months	34	8.8
• Yearly	36	9.4
• Every 2 years	26	6.8
• I don't know	53	13.8
• I don't go	218	56.6
When do you do routine health check-up?		
• When I am sick	78	20.3
• When I am healthy	76	19.7
• Both	14	3.6
• I do not do routine health check-up	217	56.4
Reasons for not Having Routine health Check-up		
• Not feeling sick	166	43.1
• Busy schedule	27	7.0
• Not aware	104	27.0
• No money	54	14.0
• Fear of outcome	34	8.8
Is a routine health check-up necessary for improving and maintaining good health of an individual?		
• Yes	330	85.7
• No	55	14.3
Have you ever being admitted in		

hospital?		
• Yes	296	76.9
• No	89	23.1

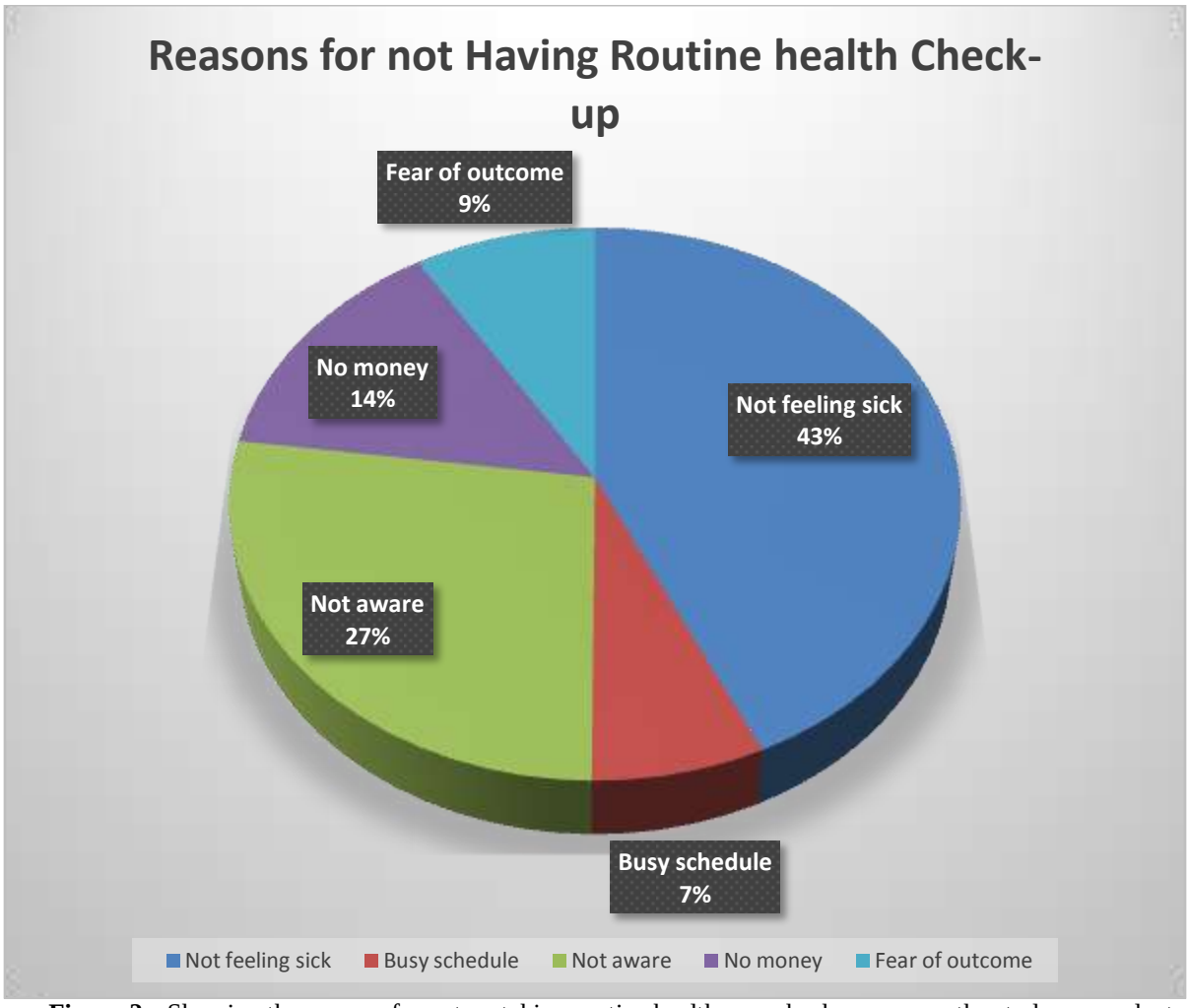

Figure 2:- Showing the reasons for not up taking routine health care check-up among the study respondents.

From the chart displayed above it can be deduced that the most reported reason for not having routine health check-up is "not feeling sick".

Table 4:- Showing the relationship between participation in routine health check-ups and the respondents' demographic characteristics.

Demographic characteristics			
Variables	χ^2	df	P-value
Age of respondents	0.732	3	0.866
Gender	1.600	1	0.206
Marital Status	3.595	5	0.609
Religion	3.357	2	0.187
Level of education	31.994	3	0.000**
Ethnicity	0.579	2	0.749
Occupation	21.098	3	0.000**
Employment status	18.144	5	0.003*
Lifestyle Factors			

Variables	χ^2	df	P-value
Exercise performance	25.769	1	0.000**
Having smoke in the past	0.277	1	0.598
Having previously taken any form of Alcohol	0.281	1	0.596
Routine health check-ups related factors			
Variables	χ^2	df	P-value
Awareness of Routine health check-ups	158.510	1	0.000**
Previous history of hospitalization	0.341	1	0.559

Significance at ($p<0.001$)

Table 4 showed the relationships between participation in routine health check-ups against the respondents' demographic characteristics where it can be observed that there exist a statistically significant relationship between respondents' level of education, occupation, and employment status with participation in routine health check-ups with generated p-values of less than 0.05 while other demographic variables are not significantly associated with participation in routine health check-ups ($p>0.05$). It can be observed that only exercise performance ($p<0.001$) is significantly associated with participation in routine health check-up among other lifestyle factors. The level of awareness of routine health check-up is significantly associated with participation in routine health check-up ($p<0.001$), while the previous history of hospitalization is not a predictor of participation in routine health check-up ($p>0.005$).

Discussion:-

This study assessed the prevalence, knowledge, practice and factors associated with routine health checkups among patients Masakaregional referral hospital in Uganda. Findings from this study shows that the demographic characteristics of the participant's majority 117(30.4%) are between the age of 26-33 years and the least age group 68(17.7%) are those who fall between 42 years and the findings from this study disagrees with a study conducted on ''Periodic medical checkup: knowledge and practice in a community in south west Nigeria'' they concluded that older people utilized medical check-up more frequently [3]. Furthermore, a study from Saudi Arabia on Knowledge and Practices Toward Routine Medical Checkup Among Middle-Aged and Elderly People of Riyadh disagree with the findings of this study that shows half of the respondents 194 (50.4%) were males with which 173(44.9%) of them were married and majority 244(63.4%) were Christians [11]. Level of education affected the uptake of health checkup among the respondent in this study, and this study also laid emphasis on role education played in seeking health care for RMC among the respondent in the community. This was contrary to finding from a study conducted by Ilesanmi et al, and Ngo et al, which shows education has no effect on uptake of routine medical checkup among the community [3,12]. Findings from this current study on Ethnicity shows revealed that despite majority of the respondent were reported to be from Muganda ethnic group, it has no effect on the uptake of the routine health checkup. However, study by Ngo et al shows a similar finding to this study that ethnicity was associated significantly with the level of uptake of RMC among respondents, and a contrary finding was reported by ilsesamni et al, showing ethnicity having effect on uptake of the RMC on the participants [3,12]. Occupation and employment status of the respondent from this study was related to uptake of RMC among the respondents of which majority of them are farmers and full-time employee respectively, and this was supported by findings from AL-Kahil et al, in saudia Arabia and Danquah in Ghana [12.13].

Despite the presence of moderate lifestyle practices by the respondents, almost half of the respondent participated in exercises habitually and it was reported from this study to play a role in the level of uptake of RMC among the respondents. Smoking of cigarettes and alcoholic consumption has no effect on the level of uptake of RMC among the respondent in this study. Lifestyle modification and preventive practices such as physical exercise, nonsmoking, and reduced alcohol consumption were seen as factors that can also increase the frequency of medical check-up among the patient. A study conducted in Australia among adults showed that an increased rate of health check attendance was found in those who had low or moderate alcohol consumption [14]. Literature has also shown low attendance rates for health routine health checkups among smokers and physically inactive patients [15]. This implies that the respondents are likely to imbibe the uptake of medical check-up if they had been adequately working on their lifestyle factors.

The uptake of routine health checkups among respondents in this study is demonstrated where it can be seen that the majority of the study participants 236(61.3%) have ever heard of routine health check-ups citing hospitals 99(25.7%) as the most used source of the information. This finding was in line with several studies across the globe on a high level of knowledge routine health checkups among respondents; Ojong et al, revealed a very high level of knowledge of routine health checkups in their study, Tahira, et al in their study on awareness among medical and non-medical students about the practice of periodic Medical Examination, Olayinka et al., also reported similar findings on a high level of knowledge among the community in southwestern Nigeria. [16,17,18]. The prevalence of routine health checks in this current study was 43.4%, this was slightly higher as compared to findings from Vuong, 51.2% in Vietnam, Al-Kahil et al 34.3% in the study from Saudi Arabia, and similar to Al Baloushi et al 22.5% also conducted in Saudi Arabia in a study conducted in Eastern Province in 2015 [11,19, 20]. Most of the reasons given by the respondents for not participated in routine Health checkup were not feeling sick and those participating in routine health checkup mostly participated in the general examination. However, the majority do believe that routine health check-up is necessary for improving good health of an individual and at the same time more than three-quarters of the total respondents have ever been previously admitted in the hospital. This current study shows the previous history of hospitalization was related to uptake of routine health checkups among the respondents. A similar research paper presented in Nigeria to assess the knowledge, attitude, and practice among health care workers agrees with the findings of our work where it showed that majority of the respondents in their research had good knowledge of routine health checkups [16]. Furthermore, the research that was done in Nigeria agrees with our findings concerning the attitude and belief that routine health checkups are necessary in improving the good health of individuals [16].

Conclusion:-

In this study, the majority of the study participants have ever heard of routine health check-ups citing hospitals as the most used source of the information. Only less than half of respondents have participated in routine health check-ups and of which, a general examination was the most often done parameter in routine health check-ups. More than half of the respondents have never participated in routine health check-ups. Also, the majority of the study respondent's educational level was ending at primary, do not habitually perform the exercise. From the research, we established a relationship between low levels of education, poor health-seeking behaviors, and the uptake of routine health checkups, therefore government and other concerned stakeholders need to sensitize communities about the general relevance of education and put across policies to ensure that education is attended too hence reducing the level of ignorance about the different health habits in addition to ensuring that the different health services are readily available and accessible to all.

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