Health Problems of Nepalese Women Attending General Health Check up in Teaching Hospital

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Abstract

Introduction: The purpose of a periodic General Health Checkup (GHC) is mainly to serve as preventive healthcare and alert healthcare providers to chronic diseases. If the health is timely evaluated, ongoing major complications and even sudden unexplained death can be prevented. Regular good health checkups every 1- 2 year generally after 35 years of age, can detect diseases.

Methods: A cross sectional study was carried out among women attending GHC at Tribhuvan University Teaching Hospital (TUTH) for a period of 6 months (January to June 2012). From the total patients attended for general health check up during this period 144 women patients were randomly selected for the study. A Performa used for GHC in TUTH was utilized for collection of information in this study. Diagnostic test for the study were also carried out in TUTH. All the standard criteria that were required for GHC were followed in the study.

Results: Among the 144 randomly selected women, 77.8% were non-vegetarian, 21.6% with alcohol drinking habits, 6.3% with smoking habit, and more than 50% aged more than 45 years. Regarding menstrual history, 44.4% were menopausal, 50.7% were menstruating and 4.9% had already undergone hysterectomy. Majority of women had obese BMI (61.1%). The radiological findings revealed that 24.3% had some lungs disease and cardiomegaly. The ECG was abnormal among 11.8% of women. The laboratory parameters of blood revealed that 23.6% were anaemic, 15.2% had raised fasting blood sugar, 3.4% had raised blood urea, and 14.5% had raised SGPT. The impressions after GHC were hypertension (27.8%), anaemia (13.9%), raised triglycerides (13.2%), urinary tract infection (10.4%), cardiomegaly (9.0%), diabetes (7.6%) and fatty liver (7.6%). It was found that diabetes, hypertension, raised triglycerides, cardiomegaly had more prevalence in age group 46-60 years of age.

Conclusion: Non-communicable diseases are common problems among women and these should be taken into account for general health check up of women.

Key words: Women, General Health Check Up, Health problems

Introduction

A health check up is a **routine examination** usually **done annually** or once every two to three years with a recommendation of once every five years[1]. It is a method of analyzing the body's current condition so that one can find problems or **symptoms of abnormality** with the body before they develop into severe conditions. The purpose of a periodic Health Check Up is mainly to serve as **preventive healthcare** and alert healthcare providers to **chronic diseases** that could occur within an individual patient and to check up for some disease that may not have

visible symptoms. Also, a lot of diseases sometime have no visible indication to be noticed, which in turn can go undetected with deathly consequences later. Generally, health checkup screen for cholesterol levels, heart rate, blood pressure, and all the general non-invasive nose, mouth, throat procedures[1].

Evidence suggests that the primary health examination (PHE) improves delivery of some recommended preventive services and may lessen patient worry. The survival analysis evidenced a significant reduction of all-cause mortality, as well as of cancer and cardiovascular-related mortality, in men and women having benefited from several PHEs [2]. If the health is timely evaluated, ongoing major complications and even sudden unexplained death can be prevented. Regular good health checkups every 1-2 year generally after 35 yrs. of age, can detect diseases in its very early stage [3]. A stepwise screening programme confirmed the presence or absence of diabetes and it is feasible and acceptable in general health check up[4]. There is evidence that lifestyle and pharmacotherapy can delay the progression of DM2 among persons with prediabetes, but little direct evidence that identifying persons with prediabetes will lead to long-term health benefits[4].

Physician's awareness working in GHC is also important. For example, increasing physicians' awareness about the risks of uncontrolled BP and improving compliance are two possible ways to manage hypertension[5]. Treatment of elevated blood pressure in adults can reduce cardiovascular events. The magnitude of risk reduction depends on the degree of hypertension and the presence of other cardiovascular risk. The different practices of GHC are targeted to reduce the risk of diseases. The British family heart study is a randomized controlled trial in general practices in 13 towns in Britain to measure the impact of a programme of cardiovascular screening and lifestyle intervention led by nurses. Lipid management in UK general practice targets the achievement of total cholesterol (TC) targets in high-risk individuals[6]. Around 60% of high-risk patients have residual dyslipidaemias despite achieving the Quality and Outcomes Framework (QOF) TC target and suggested that new patterns of treatment are required in order to extend lipid management beyond simple total cholesterol lowering[6]. General health check up provides information on health status of people, identify the risk factors of specific disease. The GHC study in Nepal revealed that obesity is increasing rapidly in both developed and developing countries and the new generations are at increased risk. The study mentioned that overweight and obesity is not uncommon in Nepali population; and is related with the higher incidence of hypertension, diabetes mellitus and IHD.

Therefore, this study was designed to identify the patterns of diseases among Nepalese women coming for General Health Checkup in TUTH. We analyzed this information for describing the most common diseases among women attending for GHC, the most common age group came for screening of diseases and the main reason for attending in GHC.

Methods

A cross sectional study was carried out in the women attending general health check up at Tribhuvan University Teaching Hospital for a period of 6 months (January to June 2012). From the total patients attended for general health check up during this period 144 women patients were randomly selected for the study. A randomization was done to select the two days a week for data collection and by this process Tuesday and Friday were selected for the study. Hence, all women patients consulting on these two days for general check up were enrolled in the study.

A Performa that is used for GHC in TUTH was used for this study. Diagnostic test for the study were also carried out in TUTH. All the standard criteria that were required for GHC were followed in the study. As per this guideline, patients were informed to bring early morning sample of stool and urine, 16 hours fasting prior attending GHC and abstinence of meat and alcohol a day before the test were informed to all GHC clients.

Different types of investigation that support to rule out pulmonary, cardiac problem, liver disease, gastro-intestinal disorder, neurological and nutritional diseases, blood disorder, endocrine problem were carried out.

GHC sister in charge conducted vital signs-blood pressure, pulse, temperature and respiratory rate. Measurement of height (cm) and weight (kg) were taken. Weighing machine, blood pressure machine and thermometer were regularly checked and calibrated for the accuracy of the data. Data entry was performed every other day using SPSS version 13.0. Descriptive analysis was done.

Results

We studied the general health check up pattern of 144 randomly selected women attending at GHC in TUTH during 6 months period (January to June, 2012). Regarding dietary pattern, most of the women were non-vegetarian (77.8%). Similarly, the alcohol drinking and smoking habits were reported among 21.6% and 6.3% respectively. The reported decreased appetite was found in 2.8% of the women. Regarding menstrual history, 44.4% were menopausal, 50.7% were menstruating and 4.9% had already undergone hysterectomy. Majority of women had obese BMI (61.1%). More than 50% of women attending GHC were of age more than 45 years.

Table 1: Personal history of women attending General health check

Characteristics	Number	Percent
Dietary pattern		
Vegetarian	32	22.2
Non-vegetarian	112	77.8
Alcohol drinking habit		
No	113	78.5
Occasional	26	18.1
Daily	5	3.5
Smoking habit		
Yes	9	6.3
No	135	93.8
Sleep pattern		
Less sleep	27	18.8
Good sleep	117	81.2
Appetite		
Decrease	4	2.8
Good	140	97.2
Menstrual History		
Menopausal	64	44.4
Menstruating	73	50.7
Hysterectomy	7	4.9
BMI		
<18	-	-
18-22.9	24	16.7
23-25	32	22.2
>25	88	61.1
Age category of women (years)		
Less than or equal to 20	1	0.7
21-35	29	20.1
36-45	35	24.3
46-60	55	38.2
More than 60	24	16.7

The findings of radiological investigations revealed that 24.3% had some lungs disease and cardiomegaly. The ECG was abnormal among 11.8% of women.

Table 2: Findings from radiological investigations

Findings	Number	Percent
Chest x-ray		
Normal	109	75.7
Lungs disease	20	13.9
Cardiomegaly	15	10.4
ECG		
Normal	127	88.2
Abnormal	17	11.8

Among 144 women attended at GHC, 25% had previous history of hypertension. Similarly, the order of previous history of diseases was cholecystectomy (10.4%), diabetes (9.7%), thyroid disease (4.8%), tubectomy (3.4%), hysterectomy (4.9%) and eye disease (2.7%).

Table 3: Significant past history of women attended for General Health Check ups

History of diseases	Number	Percent
No any problems	52	37.5
Hypertension	36	25.0
Diabetes	14	9.7
Hysterectomy	7	4.9
Cholecystectomy	15	10.4
Thyroid disease	7	4.8
Kidney disease	2	1.3
RTA	2	1.3
Tubectomy	5	3.4
Eye disease	4	2.7
Heart disease	1	0.6
Skin disease	1	0.6
Gastritis	5	2.4
Others	16	11.1
Tuberculosis	2	1.3

The laboratory parameters of blood revealed that 23.6% were anaemic, 15.2% had raised fasting blood sugar, 3.4% had raised blood urea, and 14.5% had raised SGPT.

Table 4: Laboratory parameters of blood

Parameters	Number	Percent
Hemoglobin		
Anaemic (< 12 gm/dl)	34	23.6
Non-anaemic (>12 gm/dl)	110	76.4
Fasting blood sugar		
Normal (3.5-7 mmol/l)	122	84.7
Raised (> 7 mmol/l)	22	15.2
Blood urea		
Normal (<7.0 mmol/l)	139	96.5
Raised (>7.0 mmol/l)	5	3.4
SGPT		
Normal (<40 mmol/l)	123	85.4
Raised (>40 mmol/l)	21	14.5

The impressions after GHC were hypertension (27.8%), anaemia (13.9%), raised triglycerides (13.2%), urinary tract infection (10.4%), cardiomegaly (9.0%), diabetes (7.6%) and fatty liver (7.6%). Similarly, respiratory tract infection, gall stone, gastritis, kidney stone increased SGPT were also detected in few proportions of women.

Table 5: Diagnosis during GHC of women

Diseases	Number	Percent
Normal	31	21.5
Fatty liver	11	7.6
Respiratory tract infection	6	4.2
Diabetes mellitus	11	7.6
Hypertension	40	27.8
Urinary tract infection	15	10.4
Gall stone	4	2.8
Anaemia	20	13.9
Gastritis	4	2.8
Kidney stone	3	2.1
Increased SGPT	6	4.2
Raised triglycerides	19	13.2
Cardiomegaly and ischemic heart disease	13	9.0
Others	25	17.4

Discussion

Radiological findings revealed that the lungs diseases and cardiomegaly are prevalent among Nepalese women who came for GHC. The community based prevalence of such health problems may be high. The British family heart study also found significant cardiovascular diseases and suggest for screening of cardiovascular risk factor in General Practice[7]. Correlating with the risk factors for non communicable diseases HTN, DM were most common diseases among GHC women. Early findings of the diseases like elevated BP can reduce cardiovascular event [8]. A physician awareness about risk of uncontrolled BP and can be important for management of HTN[5].

Diabetes poses a tremendous and increasing clinical and public health burden in developed countries. Now it is also a public health problem in developing countries. There are many undiagnosed diabetes cases in the community. Early screening of diabetes is important to prevent its complication[9].

Similar to the historical screening at GHC, confirmatory diagnosis also revealed GHC 7.6% women had DM and 27.8% had HTN. Similarly, other prevalent problems were raised TG-13.2%, cardiomegaly and IHD-9%. Familial hypercholestralemia is one of the most common disorders identified in primary care leading to serum cholesterol. Primary care has a role in systematic and opportunistic case finding, such as recognizing the relevance of a family history of premature coronary heart disease and/or grossly elevated cholesterol[10].

Lipid management in UK general practice targets the achievement of total cholesterol (TC) targets in high-risk individuals. Around 60% of high-risk patients have residual dyslipidaemias despite achieving the Quality and Outcomes Framework (QOF) TC target. New patterns of treatment are required in order to extend lipid management beyond simple total cholesterol lowering[11].

Our study showed 61% women attended were obese. Obesity is increasing rapidly in both developed and developing countries and the new generations are at increased risk. Those suffering from hypertension, diabetes mellitus and ischaemic heart disease were included and BMI was analyzed. Previous study showed that overweight and obesity is not uncommon in Nepali population; and is related with the higher incidence of hypertension, diabetes mellitus and IHD [12]. The increasing prevalence of obesity requires particularly primary care providers to take action [13]. Statements regarding cardiovascular risks are the most frequent barriers to lifestyle counseling and possible solutions should be discussed with a view to promoting individualized and target management of overweight patients.

Although HTN and DM are prevalent, anaemia was also common in women. Early diagnosis of anaemia represents an important task within primary care settings. The reports on the frequency of new cases of anaemia among patients attending primary care settings are also common in rural areas[14].

Our study showed significant women had UTI (10.4%). Other studies also recommend for screening of women in GHC[15].

Conclusion

Diabetes and hypertension are the most common diseases diagnosed in GHC although anaemia and UTI is also the least common. These findings should be taken into account for general health check up of women. Effective management and counseling are very important in General practice to reduce risk behaviours of women for these diseases.

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