



Knowledge and treatment preferences for erectile dysfunction among Malaysian hypertensives

KEYWORDS

erectile dysfunction; treatment preferences; hypertension.

Dr Mohd Ariff Fadzil

Dr Zaliha Ismail

Faculty of Medicine, Universiti Teknologi MARA, Sungai Buloh Campus, 47000, Sungai Buloh Selangor, Malaysia

Faculty of Medicine, Universiti Teknologi MARA, Sungai Buloh Campus, 47000, Sungai Buloh Selangor, Malaysia

ABSTRACT *Erectile dysfunction (ED) is commonly associated with hypertension. However, little is known about the prevalence, knowledge, treatment preferences and experience for erection difficulties among hypertensive Malaysian men. This cross-sectional study involved 264 hypertensive patients who attended outpatient clinics. Their socio-demographic characteristics and detailed medical history were recorded. The blood pressure of all participants was measured through standardised method. The Malay version of International Index of Erectile Function-5 (IIEF-5) was used to assess ED. Their knowledge regarding hypertension and ED and their treatment preferences were assessed. Out of 264 who consented to participate, 77.7% experienced ED. Only 40.5% seek treatment for erectile difficulty with the majority (92.5%) prefer traditional or complimentary medicine (TCM).*

INTRODUCTION

Erectile dysfunction (ED) is commonly associated with hypertension.⁽¹⁾Hypertension is prevalent all over the world with the estimated total number of people with hypertension in 2000 was 972 million and by 2025 it was predicted to increase by about 60% to a total of 1.56 billion.⁽²⁾ In Malaysia, the prevalence of hypertension amongst those aged 18 years and above had increased to 32.7% or 5.8 million in 2011.⁽³⁾

Past studies had reported increased prevalence rate of ED among hypertensive patients, (1,4-7) however there are wide variations on the prevalence rates reported (22.9%-77%)

Data on ED in Malaysia are limited particularly among hypertensive patients.

The prevalence of ED, the risk factors, knowledge and treatment preferences among hypertensive patients has not been fully investigated. Sexuality is an important issue which is frequently overlooked by general practitioners and specialists in the hypertension field. ED is one of the major obstacles for noncompliance in the antihypertensive treatment.⁽⁸⁾ Antihypertensive drugs have major influence on sexual dysfunction and, thus, quality of life.

METHODS

We conducted a cross-sectional study among outpatient clinic attendees with hypertension in Kuala Lumpur, Malaysia. Prior approval was obtained from the university ethics committee before the commencement of this study. Consecutive patients with known primary hypertension aged 30 years old and above who voluntarily consented to participate were selected after being briefed on this study. Participants who were uncooperative or unable to read or write in Malay language were excluded.

Participants were requested to complete self-administered questionnaires which include the socio-demographic characteristics and detailed medical history. Data on current medication was extracted from patients' health record. The average blood pressure (BP) of three seated BP readings was recorded after the participant had rested for at least five minutes. BP was taken using validated Omron automated blood pressure set model IA1B (Omron Healthcare Co Ltd, Kyoto, Japan).

The validated Malay version of International Index of Erectile Function-5 (IIEF-5)⁽⁹⁾ questionnaires was used to assess ED. The English version was developed by Rosen et al.,⁽¹⁰⁾ which

is widely used scale for screening and diagnosis of ED and severity of ED in clinical practice and research. A cutoff score of 17 was taken to distinguish between men with erectile dysfunction and those without as suggested by TO Lim et al. ⁽⁹⁾

ED was defined as the inability to achieve and/or maintain an erection sufficient to permit satisfactory sexual intercourse. ⁽¹¹⁾ Hypertension was defined as either a mean systolic blood pressure (SBP) ≥ 140 mm Hg, and/or a mean diastolic blood pressure (DBP) ≥ 90 mmHg, and/or on treatment with antihypertensive medication.⁽¹²⁾

Data was analyzed using Statistical Package for Social Sciences version 16.0 (SPSS Inc, Chicago, IL, USA). The means and proportions were calculated to summarize the results.

RESULTS

A total of 350 hypertensive patients were interviewed and 264 consented to participate in this study (response rate 75.4%). Table 1 summarized the characteristics of the study participants. The mean age was 59.80 ± 10.62 years. Majority of participants (79.9%) were on anti hypertensive treatment but only 60.6% had their BP under control. The mean ED score was 12.58 ± 6.65 and the prevalence rate of ED was 77.7%. The proportion of participants who were aware that 'ED is a complication of hypertension' was 33.9% and 'ED is a side effect of hypertension medication' was 28.7% (table 2). The proportion of respondent who admitted to ever seek treatment for ED was only 40.5% of which 92.5% used TCM whereas only 7.5% used prescription medicine.

Table 1: Characteristics of the study group.

Variable	n (%)	(Mean \pm SD)
Age (years)		59.80 \pm 10.62
Educational status		
• No formal education	29 (11.0)	
• Primary	115 (43.6)	
• Secondary	92 (34.8)	
• Tertiary	28 (10.6)	
Marital status		
• Single	10 (3.8)	
• Married with children	209 (79.2)	
• Married without children	33 (12.5)	
• Widowed/Divorced	12 (4.5)	
History of diabetes mellitus.		
• Yes	186 (70.5)	
• No	78 (29.5)	

Hypertension on treatment		
• Yes	211 (79.9)	
• No	53 (20.1)	
BP under control		
• Yes	160 (60.6)	
• No	104 (39.4)	
BP (mmHg)		
• Systolic		142.26±18.07
• Diastolic		82.40±11.15
IIEF-5 score		12.58± 6.65
ED		
• Yes	205(77.7)	
• No	59(22.3)	

Table 2: Knowledge of ED as a complication of hypertension, anti hypertensive treatment and treatment practices among hypertensive with ED

Item	n	%
ED is a complication of hypertension		
• True	104	(33.9)
• Not true	49	(16)
• Don't know	94	(30.4)
ED is one of the side effects of hypertension medication		
• True	88	(28.7)
• Not true	49	(16)
• Don't know	110	(35.8)
Types of treatment		
• Prescription medicine	8	(7.5)
• Traditional or Complementary Medicine	99	(92.5)

DISCUSSION

The ED prevalence rate of 77.7% from our study was comparable to other studies^(4, 5) which was much higher than the rates reported in studies among general Malaysian population.^(8, 13)

With regards to patients' awareness of ED as a complication of hypertension and its treatment, the proportions of patients who were aware were found to be low (33.9% and 28.7% respectively); this justifies the need for more health education to inform patients of the potential risk of ED among hypertensive patients or as a result of the anti hypertensive medication.

In terms of treatment for ED, we found that only 40.5% seek treatment for ED. Possible explanations for this observation

were; patients with ED could be embarrassed to bring up the topic to their doctor or the physicians were reluctant to initiate discussion about sexual problem with patients under their care. We also observed that the majority of those who responded, 92.5% took TCM whereas only 7.5% admitted using prescription medicine. This observation among Malaysian was similar to another study which reported high percentage (60%) of those reported ED use TCM.⁽¹⁴⁾The main reason cited was TCM has fewer side effects compared to conventional medicine. The other reason could be due to the price of oral medication for ED which is beyond the means of the ordinary patients.

It is therefore important for doctors treating hypertensive patients to recognize and manage ED in view of the high prevalence rate of ED among Malaysian hypertensive patients. ED associated with hypertension and anti hypertensive agents may impact the ability of patients to stay on therapy and lead to impaired quality of life.

Several limitations were noted in our study. Firstly, selection bias cannot be excluded since the participants were recruited on voluntary basis. Secondly, since the participants were recruited from outpatient clinics, the result cannot be generalized to the general population. The third limitation is that our study did not explore the sexual function and the dynamic relationship issues between the respondents and their female counterparts. In a local study, sexual functioning or relationship problems of their counterparts have significant impact on the males' sexual performance.⁽¹⁵⁾Finally, the IIEF-5 focuses on heterosexual activity (vaginal intercourse) and therefore may be less suited for assessing individuals whose primary sexual activity is not heterosexual intercourse.

CONCLUSION

In summary, high prevalence rate of ED was found among Malaysian hypertensive patients. However, the proportion of patients with ED who seek treatment was low and their preferred mode of treatment was TCM. Awareness on the availability of modern medication for ED should be intensified. Factors associated with ED were age, concomitant diabetes mellitus and the use of diuretics, but the usage of ARB seem to improve erectile function. Future research should focus on the low treatment rate of ED among hypertensive patients and the reasons why TCM is the treatment of choice among Malaysian hypertensive patients with ED.

ACKNOWLEDGEMENT

Support for this research was provided by the Research Management Institute, Universiti Teknologi MARA, MALAYSIA.

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