ORIGINAL ARTICLE

Predictors for adherence in hypertensive therapy- A study in rural area of District Dehradun

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Abstract

Background: The adherence to hypertensive medication is not good in our country making it an important medical and public health issue. Factors contributing to non-compliance may vary from country to country. It is furthermore a dynamic phenomenon and its degree vary from time to time. Information on the degree of anti-hypertensive treatment compliance is lacking in our country. **Objectives:** (1) Measuring the medication adherence using validated tools and (2) investigating the patient related, disease related, medication related and health care system related factors affecting patients adherence to anti-hypertensive therapy. **Methodology:** a) Study design: cross sectional descriptive questionnaire based analytical study b) Sampling: Multistage sampling method c) Statistical analysis: Chi square, odds ratio and linear regression. **Results:** a) Adherence to antihypertensive therapy was 73%, b) Age was found to be significantly and independently associated with adherence, c) Patients on mono therapy were less adherent compared to those on two or three drugs, d) Patients who were aware of the association between certain risk factors for hypertension had better adherence. **Conclusion:** Future studies are recommended to confirm our findings, as adherence to medication predicts better outcomes and indicators of poor adherence to a medication needs counselling and interventions to improve adherence

Key Words

Adherence; Knowledge; hypertensive therapy; mono therapy; age

Introduction

Hypertension is one of the major risk factor for developing coronary heart disease, stroke and congestive heart failure. The World Health Organization (WHO) has estimated that about 62 % of the cerebrovascular disease and 49% of the ischemic heart disease worldwide are attributed to suboptimal blood pressure levels. High blood pressure is estimated to cause 7.1 million deaths annually, accounting for 13% of deaths globally (1).

Over 26% of the adult world population was estimated to have hypertension in the year 2000, which is likely to increase to 29.2% by the year 2025.

In India, prevalence of hypertension is increasing rapidly in urban areas and the same trend is now being observed in rural areas. Though the prevalence of hypertension in India has been reported to vary regionally, recent pooled epidemiological studies suggest the disease prevalence in adults is 25% in urban areas and 10% in rural areas. This clearly indicates that adherence to hypertensive medication is not good in our country making it an important medical and public health issue (2). According to Berenson GS *et al*. (2006) poor adherence to therapy is the major reason that large percentage of patients with hypertension fails to achieve good blood pressure control (3).

Adherence has been described by WHO as "the extent to which a person's behaviour taking medication, following a diet, and/or executing life style changes corresponds with agreed recommendations from a health care provider" (4). WHO describes poor adherence as one of the most important cause for uncontrolled blood pressure and estimates that 50 – 70% of the people do not take their anti-hypertensive medication as prescribed (5). Adherence is dependent on numerous factors and has been shown to vary from 0 to 100% in different population studied (6,7,8). Factors such as age (9, 10) gender (11), low socio economic status and severity of disease10, number of pills per day (9,11) side effects of medication (9,10) patient's inadequate understanding of the disease and importance of treatment (9,10) lack of social support (12, poor patient provider relationship13, forgetfulness (14) and presence of psychological problems, especially depression (10,13) have been shown to affect adherence in various populations.

Study conducted worldwide indicate that despite the availability of effective antihypertensive therapy, over half do not take any treatment, and more than half of those on treatment, have blood pressure above threshold level of 140/90 mm Hg. A cross sectional study on compliance to anti-hypertensive therapy by Almas A (14) in the year 2006 found that 43% of the patients were non-compliance with their medications. In another study conducted in neighbouring Pakistan, 77% of the patients were adherent to the prescribed dosage of antihypertensive drugs (15). Factors contributing to non-compliance may vary from country to country. It is furthermore a dynamic phenomenon and its degree vary from time to time. Identification of factors contributing to non-compliance is very critical for planning and performing intervention strategies.

However, information on the degree of anti-hypertensive treatment compliance is lacking in our country and there is dearth of community based information on adherence.

Aims & Objectives

(1) To measure the medication adherence using validated tools and (2) To investigate the patient disease, medication and health care system related factors affecting patient's adherence to anti-hypertensive therapy

Material and Methods

A cross sectional descriptive questionnaire based study was carried out in the rural area of district Dehradun for a period of six months i.e. from June to December 2012. The study sample included following eligibility criteria for inclusion: diagnosed cases of essential hypertension, aged 40 years and above, on antihypertensive medication for at least 3 months, on at least one antihypertensive medication and not more than three antihypertensive medications and agreed to give consent and participate. The sample size was calculated using the formula, $n = Z2\ (1-\alpha/2)pq/d2$ (where $Z(1-\alpha/2) = 1.96$ at 95% confidence, p = prevalence of adherence, $q = 1-p$, and d = absolute allowable error.) Taking the prevalence of adherence to be 50%, and absolute allowable error as 5%, the sample size estimated was 400. Adding 10% for non-response, the required sample came to be 440.

Multistage sampling method was used to select the study sample. Out of six blocks in district Dehradun 10% (1 block i.e Doiwala block was purposively selected as it catered to rural field practice area of the department. In the next stage, out of 5 nyaya panchayats, 10% (1 nyaya panchayat) was sampled randomly. Since the nyaya panchayats catered to 19 villages, 10% (2 villages) was selected randomly to achieve the required sample size of 440.

A literature review was initially done through web based search engine on patients adherence to medication conducted globally. The search engine were Pubmed (http://www.ncbi.nlm.nih.gov/pubmed) and Google scholar (http://scholar.google.co.in/). Key words entered were "antihypertensive medications" and factors responsible for non-adherence". Delphi technique was used for framing the domain and items of the questionnaire. It consisted of academicians from Community medicine, internal medicine, nursing and pharmacology. A 22 item scale measuring four domain was thus developed for measuring factors for adherence namely "patients factors", "disease factors", "medication related factors" and "health care system related factors". Those questions in which nil response were more than 30% were excluded from final analysis. The methodology thus resulted in reducing 22 items to 17 items (Table 1). The questionnaire also extracted information regarding subjects' socio demographic

characteristics and required 15-20 minute for administration

The study was approved by Institute Ethical Committee. Informed consent was taken from each study subject interviewed.

Medication Adherence: To measure adherence subjects self-reports were used. They were non-judgementally asked how often they missed the doses. They were asked the total number of tablets they have been prescribed per week and how many tablets they missed in last 3-7 days to minimize recall bias. Adherence rate was calculated as "pills prescribed over the time, divided by pills prescribed over that specific period of time".

To increase the strength and consistency of the finding, Morisky 4 item questionnaire for self-reported medication adherence scale (MMAS) (17), was also administered to the study subjects. The scale is scored 0 point for each "yes" and 1 point for each "no". The total score ranges from 0 (adherent) to 4 (non adherent). Score of 1-2 is categorised as medium adherent.

Data analyses: Data was analysed using SPSS 17.0 for windows. Categorical values were compared using chi square test. Odds ratios (with 95% confidence interval) were calculated from 2x2 contingency table. Adherence was represented in percentage and treated as continuous value. For analysis of adherence, a cut off value of "80%" was used, as has been done in previous studies (18,19). 'P' value of < 0.05 was considered as statistically significant for all analyses. Association of adherence with MMAS were checked with the help of linear regression using MMAS as the dependent variables and study variables as independent variables

Results

After pilot-testing and refining the questionnaire with 20 individuals, a total of 440 study subjects were interviewed from 2 villages of rural field practice area. Table 2 shows the socio demographic and clinical characteristic of study subjects. According to the 80% cut off level, 321 (73%) of the subjects were found to be adherent while 119 (27%) were non-adherent. There were a total of 199 males and 241 females. No statistically significant difference was however seen regarding adherence between sexes. Maximum 228 (51.8%) cases was seen in age group of 50 -60 years. The proportion of cases observed among the elderly i.e. more than 60 years was 18.1%. Statistically significant level of adherence ($p < 0.05$) was seen with increasing age, increasing socio economic status and increasing level of education. Married subjects and those having positive family history of hypertension were also more adherent to therapy and it was also statistically significant ($p < 0.05$).

Table 3 shows the predictors of patient variable for MMAS ≤ 2. The regression analysis for this equation predicts that age, educational status, monthly income and number of prescribed drugs were positively associated with MMAS score while missing the dose and symptomatically relief were inversely correlated with the score. Numeric obtained the largest β weight ($\beta = 0.023$, $p < 0.001$), demonstrating that it made the largest contribution to the regression equation, while holding all other predictor variables constant

Table 4 shows the prevalence of various personal, disease related, medication related and health care related characteristics that in the patient's views affected their drug adherence. While factor such as understanding the need of medication (63.2%) and effectiveness of the prescribed medication (57.7%) along with availability of support system (81.8%), were associated with better adherence, the most common discouraging factors were cost of medication (40.2%) forgetfulness (28.8%), increased duration of treatment (26.6%), perceived side effects (17.0%) and dissatisfaction with the health care provider (12.8%).

Discussion

Adherence to antihypertensive therapy as measured by our study was 73% in the studied rural population, when defined by the 80% cut off. The factors showing significant associations with adherence were age, number of drugs prescribed along with patients' knowledge of the disease and treatment including their beliefs and practices.

Among the studies conducted on various populations of the world, using a similar cut off for adherence, our observation is higher than what has been reported in a similar study in Malaysia (44.2%) (9) and comparable to another study conducted in Egypt (74.1 %) (20) but lower than the study conducted by Inkster ME *et al* in the Western population of Scotland which reported adherence as 91% (21). However, population studies with larger samples are needed to support the findings and claim that people of a developing nation like ours, are generally more adherent to their medication.

Age was found to be significantly and independently associated with adherence in our study, with better adherence observed in older people. This finding is consistent with other studies (22,23) although there are studies which show either that either is no association (20,21) or decreasing adherence with increasing age (24). Reason for better adherence in this age group could be due to better support system provided by the family members leading to reducing self-reliance. It is common and usual practice for other family members in Indian society, particularly in rural area to take full responsibility of the medication routine of the patients.

A direct relationship was observed between adherence and number of pills prescribed. Patients on mono therapy were seen to be less adherent compared to those on two or three drugs. This finding is in contrast to that which has been frequently reported. A meta-analysis of eight studies reports that the average adherence for once-daily dosing was significantly higher than for multiple daily dosing (91.4% vs. 83.2%, respectively<0.001) (25). Another study conducted by Hassan NB *et al* in an Asian population9 however identified no relation between increasing number of drugs and poor adherence. One reason for better adherence in multi daily dosing could be that patients on multiple pills feel that the severity of their disease is significant and hence become more cautious with their treatment, while those those on mono therapy, usually take their treatment lightly. Another reason could perhaps be that when patients have to take multiple medications, they are less prone to forget about taking them.

Knowledge of hypertension significantly affected adherence in our study population. Patients who were aware of the association between certain risk factors for hypertension, such as high salt intake, stress and a positive family history, had better adherence compared to those who with poorer knowledge. Krousei-Wood *et al* in their study in the developed world, however, found no association between patients knowledge and adherence (23).

Egan *et al* (26) found forgetfulness, adverse effects and not liking to take medication among the reasons for poor adherence in a nationally representative sample in the United States. Commonly encouraging factors, such as understanding the need and effectiveness of medication, a good support system and employing methods to reduce forgetfulness such as keeping medication in sight, are all significantly associated with better adherence in our population. Similarly, among the discouraging factors commonly reported in our population were cost (40%), followed by forgetfulness (28%) and increased duration of treatment (27%).

Since self-reporting was used as the only method of measuring adherence in our study. This can be one of the limitations. This method has the disadvantages of recall bias of eliciting only socially acceptable responses and hence may have overestimated adherence. However, it is simple, economically feasible and the most useful method in population settings. Apart from harbouring the known limitations of the cross-sectional design, our study involved subjects from two villages only and hence the results cannot be generalized. Most adherence studies based on self-reporting generally ask patients to give information about long durations (usually ranging from 1 month to 1 year) to avoid any bias introduced by the brevity of the duration. Increasing the duration of time period however increases the chance of introducing recall bias. Self-reported adherence based on a short duration of time even has equal chances of being under-reported as well as over-reporting, depending on the patient's behaviour in the recent past, but it somehow minimizes the chance of recall bias and hence is more accurate.

The use of validated tools in our study further strengthens the reliability of our results. MMAS had a significant linear relation with adherence measured as a continuum. Most of the factors associated with adherence were associated with MMAS score of ≤ 2, more studies, however, are needed to demonstrate the validity of MMAS in the population based study. Factors which were common and significantly affecting adherence has only been included in the present study.

Conclusion

To conclude, our study found younger age, monotherapy, poor awareness and low socio economic status to be the strongest factors affecting adherence to anti-hypertensive medication. Future studies are recommended to confirm our findings, as adherence to medication predicts better outcomes and indicators of poor adherence to a medication needs counselling and interventions to improve adherence. Education campaigns to increase awareness about the risk factors, natural history, complications and treatment of hypertension is

strongly recommended and needs implementation. Global events, such as World Hypertension Day and World Heart Day could be used as a forum to highlight these issues.

Recommendation

Patient support groups can be employed to help the non-adherent patients. Print and audio visual media would be very helpful in dissemination of information. Most importantly, health care provider and health educators along with medical social workers should pay special attention to patient education and counselling when dealing with hypertensive patients.

Authors Contribution

AKS & SDK: conceived, designed, analyzed the data and supervised the project. HS was involved in analyzing the data along with application of statistical tests

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References

1. Guidelines subcommittee. World Health Organisation-International Society of Hypertension. Guidelines for the mangement of hypertension-part ll. Cardiology today 2006; 6:146-64.
2. Haynes RB, Taylor DW, Sackett DL, Gibson ES, Bernholz CD, Mukherjee J. Can simple clinical measurements detect patient noncompliance? Hypertension. 1980 Nov-Dec;2(6):757-64. PubMed PMID: 7007235.[PubMed].
3. Srinivasan SR, Myers L, Berenson GS. Changes in metabolic syndrome variables since childhood in prehypertensive and hypertensive subjects: the Bogalusa Heart Study. Hypertension. 2006 Jul;48(1):33-9. Epub 2006 Jun 12. PubMed PMID: 16769996.[PubMed]
4. World Health Organization. Chapter XIII. Hypertension in adherence to long term therapies – Evidence for action 2003. pp 129-136. Available:http:1/www.emro.who.int/ncd/publications/adherence_report.pdf. Accessed September 2014.
5. Mant J, McManus RJ. Does it matter whether patients take their antihypertensive medication as prescribed? The complex relationship between adherence and blood pressure control. J Hum Hypertens. 2006 Aug;20(8):551-3. Epub 2006 May 18. PubMed PMID: 16710290.[PubMed].
6. Haynes RB, McDonald HP, Garg AX. Helping patients follow prescribed treatment: clinical applications. JAMA. 2002 Dec 11;288(22):2880-3. PubMed PMID: 12472330.[PubMed].
7. Krousel-Wood M, Hyre A, Muntner P, Morisky D. Methods to improve medication adherence in patients with hypertension: current status and future directions. Curr Opin Cardiol. 2005 Jul;20(4):296-300. Review. PubMed PMID: 15956826.[PubMed].
8. DiMatteo MR (2004) Variations in patients' adherence to medical recommendations: a quantitative review of 50 years of research. Med Care 42: 200-209[PubMed].
9. DiMatteo MR. Variations in patients' adherence to medical recommendations: a quantitative review of 50 years of research. Med Care. 2004 Mar;42(3):200-9. PubMed PMID: 15076819.[Pubmed].
10. Osterberg L, Blaschke T. Adherence to medication. N Engl J Med. 2005 Aug 4;353(5):487-97. Review. PubMed PMID: 16079372.[PubMed].
11. Bloom BS. Daily regimen and compliance with treatment. BMJ. 2001 Sep 22;323(7314):647. PubMed PMID: 11566816; PubMed Central PMCID: PMC1121223.[PubMed].
12. Lennon C, Hughes CM, Johnston GO, McEinay JC (2001) Identification of psychosocial factors which influence patient adherence with antihypertensive medication. Int J Pharm Pract 9: RS.
13. Wang PS, Bohn RL, Knight E, Glynn RJ, Mogun H, Avorn J. Noncompliance with antihypertensive medications: the impact of depressive symptoms and psychosocial factors. J Gen Intern Med. 2002 Jul;17(7):504-11. PubMed PMID: 12133140; PubMed Central PMCID: PMC1495082.[PubMed]
14. Almas A, Hameed A, Ahmed B, Islam M. Compliance to antihypertensive therapy. J Coll Physicians Surg Pak. 2006 Jan;16(1):23-6. PubMed PMID: 16441983.[PubMed].
15. Hashmi SK, Afridi MB, Abbas K, Sajwani RA, Saleheen D, Frossard PM, Ishaq M, Ambreen A, Ahmad U. Factors associated with adherence to anti-hypertensive treatment in Pakistan. PLoS One. 2007 Mar 14;2(3):e280. PubMed PMID: 17356691; PubMed Central PMCID: PMC1805684.[PubMed]
16. DiMatteo MR, Sherbourne CD, Hays RD, Ordway L, Kravitz RL, McGlynn EA, Kaplan S, Rogers WH. Physicians' characteristics influence patients' adherence to medical treatment: results from the Medical Outcomes Study. Health Psychol. 1993 Mar;12(2):93-102. PubMed PMID: 8500445.[PubMed].
17. Morisky DE, Green LW, Levine DM. Concurrent and predictive validity of a self-reported measure of medication adherence. Med Care. 1986 Jan;24(1):67-74. PubMed PMID: 3945130.[PubMed].
18. Garfield FB, Caro JJ. Compliance and hypertension. Curr Hypertens Rep. 1999 Dec;1(6):502-6. PubMed PMID: 10981113.[PubMed].
19. Rudd P, Ahmad S, Zachary V, Barton C, Bonduelle D (1991) Antihypertensive drug trials, contributions from medication monitors. In: Cramer JA, Spilker B, editors. Patient Compliance In Medical Practice and Clinical Trials. Raven Press Ltd. New York: pp 283-99.
20. Youssef RM, Moubarak II. Patterns and determinants of treatment compliance among hypertensive patients. East Mediterr Health J. 2002 Jul-Sep;8(4-5):579-92. PubMed PMID: 15603041.[PubMed].
21. Inkster ME, Donnan PT, MacDonald TM, Sullivan FM, Fahey T. Adherence to antihypertensive medication and association with patient and practice factors. J Hum Hypertens. 2006 Apr;20(4):295-7. PubMed PMID: 16424861.[PubMed].
22. Caro JJ, Salas M, Speckman JL, Raggio G, Jackson JD. Persistence with treatment for hypertension in actual

practice. CMAJ. 1999 Jan 12;160(1):31-7. PubMed PMID: 9934341; PubMed Central PMCID: PMC1229943.[PubMed].
23. Krousel-Wood M, Thomas S, Muntner P, Morisky D. Medication adherence: a key factor in achieving blood pressure control and good clinical outcomes in hypertensive patients. Curr Opin Cardiol. 2004 Jul;19(4):357-62. Review. PubMed PMID: 15218396.[PubMed].
24. Gryglewska B. How can we improve the effectiveness of treatment in elderly hypertensives? Blood Press Suppl. 2005 Dec;2:46-9. Review. PubMed PMID: 16429643.[PubMed]
25. Iskedjian M, Einarson TR, MacKeigan LD, Shear N, Addis A, Mittmann N, Ilersich AL. Relationship between daily dose frequency and adherence to antihypertensive pharmacotherapy: evidence from a meta-analysis. Clin Ther. 2002 Feb;24(2):302-16. PubMed PMID: 11911560.[PubMed].
26. Egan BM, Lackland DT, Cutler NE. Awareness, knowledge, and attitudes of older americans about high blood pressure: implications for health care policy, education, and research. Arch Intern Med. 2003 Mar 24;163(6):681-7. PubMed PMID: 12639200.[PubMed]

Tables

TABLE 1 DESCRIPTIVE ITEMS FOR STUDY SUBJECT ADHERENCE QUESTIONNAIRE

Domain	Items of scale
A. Patients factors	a) Forgetfulness
	b) Lack of belief in the value of the medication
	c) Actual and perceived adverse effects of the drug
	d) Lack of complete understanding of medication
	e) Perceived lack of efficacy of drug
	f) Available of support system
B. Disease factors	a) Few symptoms present
	b) Perceived seriousness of disease change
C. Medication related factors	a) Complexity of regimen e.g. frequency of daily doses
	b) No. of drugs prescribed
	c) Occurrence and severity of adverse effects
	d) Unpleasant taste or smell
	e) Increased duration of treatment
D. Health care system related factors	a) Cost of medication
	b) Use of multiple physicians
	c) Dissatisfaction with their healthcare provider
	d) Long waiting time or inconvenience.

TABLE 2 DEMOGRAPHIC AND CLINICAL CHARACTERISTICS OF STUDY POPULATION

Characteristics	N	%	Adherent (> 80%) N=321 (73%)		Non adherent (<80%) N=119 (27%)		P value
Age in years							
40-50	132	(30.1)	76	(57.6)	56	(42.3)	X^2= 23.5
50-60	228	(51.8)	178	(78.0)	50	(22.0)	0.0001
>60	80	(18.1)	67	(83.7)	13	(16.3)	
Sex							
Male	199	(45.3)	154	(77.4)	45	(22.6)	X^2= 3.62
Female	241	(54.7)	167	(69.2)	74	(30.8)	0.05
Education							
Illiterate	119	(27.0)	71	(60.0)	48	(40.0)	
Primary or below	108	(24.5)	83	(77.0)	25	(23.0)	X^2= 14.7
Intermediate /secondary	128	(29.0)	101	(78.0)	27	(22.0)	0.002
Graduation and above	85	(19.5)	66	(77.6)	19	(22.4)	
Socio Economic Status							
Lower	174	(39.5)	138	(79.3)	36	(20.7)	X^2=9.48
Upper lower	120	(27.3)	82	(68.0)	38	(32.0)	0.05
Lower middle	62	(14.0)	38	(61.0)	24	(39.0)	
Upper Middle	57	(13.0)	42	(73.7)	15	(26.3)	
Upper	27	(6.3)	21	(77.8)	06	(22.2)	

Marital Status							
Single	14	(3.2)	05	(35.7)	09	(64.3)	
Married	389	(88.4)	293	(75.3)	96	(24.7)	X^2=13.1
Widowed	37	(8.4)	23	(62.2)	14	(37.8)	0.001
Family H/O HTN							
Present	213	(48.5)	172	(81.0)	41	(09.0)	X^2=12.7
Absent	227	(51.5)	149	(65.6)	78	(34.4)	0.001

TABLE 3 PREDICTORS OF FACTORS FOR MMAS ≤ 2

Characteristics	B	95% Confidence interval	P value
Age	0.126	0.076 – 0.207	0.35
Educational Status	0.237	0.123 – 0.454	0.001
Monthly income	0.022	0.0001 - 0.044	0.001
Mono therapy	0.142	0.120 – 0.167	0.001
Missing the dose	-0.146	-0.084 - -0.216	0.50
Symptomatic relief	-0.36	- 0.63 - -0.15	0.007

TABLE 4 ENCOURAGING AND DISCOURAGING FACTORS FOR ADHERENCE (N=440)

Factors	Reason for non adherence	No.	(%)
Encouraging factors	Availability of support system	360	81.8
	Understanding the need of medication	278	63.2
	Readily availability of medicine	266	60.4
	Keeping medication in sight	262	59.5
	Effectiveness of prescribed drugs	254	57.7
	No. of drugs prescribed	244	55.4
Discouraging factors	Cost of medication	177	40.2
	Forgetfulness	127	28.8
	Increased duration of treatment	117	26.6
	Actual and perceived adverse effects of the drug	75	17.0
	Dissatisfaction with the health care provider	54	12.8
	Cultural beliefs	44	10.0
	Lack of understanding the prescription	39	8.9
	Perceived lack of efficacy of drug	32	7.1