Commentary

Do we care asthma?

Asthma accounts for an overall prevalence of around two per cent in both children and adults in India in various population-surveys[1]. It also accounts for high disease related morbidity measured on indices such as the school or work absenteeism, emergency-room visits and hospitalization. Asthma is one of the most common diseases confronted not only by the physicians and paediatricians, but also by primary care physicians and general medical practitioners. It is, therefore, a matter of concern to know that the management of asthma in the community is inadequate and the quality of life is poor. The article by Kotwani and colleagues in this issue[2] is a reminder to the repeated observations related to wide gaps between the desirable and the actual management-practices on asthma. The authors in the study report their findings on 50 patients of confirmed asthma, interviewed with the help of questionnaire on Quality of Treatment, Asthma-knowledge and the widely available Asthma Quality of Life Questionnaire (AQLQ)[2]. They have shown the presence of an unsatisfactory patient-doctor contact, as well as poor knowledge about asthma and its management amongst patients. Importantly, the use of AQLQ provides an objective assessment of the quality of life (QOL) which can further help the investigators to measure the response to different educational interventions and treatment strategies.

Pitfalls of asthma management

There have been a limited number of investigations on this issue in India in the past. Most such reports reveal marked deficiencies in knowledge and inadequacies in treatment practices of asthma amongst general practitioners[3,4]. A video simulation study of the management of asthma exacerbations revealed significant variations in their recognition and approach among practitioners in Chennai[5]. Similarly, in response to a simple questionnaire study to know

the communication skills of physicians about asthma, the replies of 82.4 per cent were not considered as "convincing"[6]. The knowledge of the disease and general treatment guidelines among patients and parents of asthmatic children is critical for management of asthma. This again is not only insufficient but often misconceived and misguided[7].

To add to the problem, the retail pharmacies provided highly inadequate medication and consultations in a simulated clients study[8]. Moreover, the availability of inhalational medicines for asthma is poor particularly in the public sector where the low-income populations are likely to receive treatments[9].

Asthma control measurement

Management of asthma is best assessed by the comprehensive asthma control than the individual parameters of severity, pulmonary function tests or use of medications. Asthma control essentially refers to control of disease manifestations. The disease with the existing methods of treatment can neither be cured nor completely prevented. It is, therefore, best categorized on the basis of control. Several different tools for measurement of asthma control have come into popular use in the recent past[10-13]. Of these, the Asthma Control Test (ACT) and the Asthma Control Questionnaire (ACQ) are the more frequently employed tests. ACT in particular has been found to be useful in the Primary Health Care facilities in the developing countries[14]. Unlike ACQ and Asthma Control Scoring System (ACSS) which includes pulmonary function test, ACT and Asthma Therapy Assessment Questionnaire (ATAQ) are symptom based scores, hence easy to administer. ATAQ however, does not include the presence of day time symptoms, and somewhat limited in scope. Asthma Related Quality of Life Questionnaire (AQLQ) on the other hand, is more

useful to quantify the QOL in asthma, and assess the response to treatments.

It is difficult to quantify asthma control based on symptom score or pulmonary function tests. There is no validated scheme for categorization of control. In clinical practice, the most recommended classification consists of three categories - controlled, partly controlled and uncontrolled asthma[10]. It includes assessment of current clinical features [day-time symptoms, limitation of activities, nocturnal symptoms, awakening, need for reliever/rescue medication and lung function tests (PEF or FEV_1)] [10]. Ideally, the control should also include the assessment of future risk of exacerbations, instability, rapid decline in lung function and side effects. The ultimate goal of these measurements however, aims to improve the management of asthma. This is an achievable goal but somehow distant in view of the wide variations in the management practices.

Asthma education

Asthma which commonly starts in childhood or adolescence, is a life-long disease. It is of paramount importance for the patients and their families to educate themselves about the disease control and potential complications. The organized asthma-education programmes focus at the patients, their families and other personnel involved in asthma care. They are provided education to recognize the symptoms and the severity, how to respond appropriately and maintain asthma control. It is equally important for the school teachers to make themselves aware of the first-line home management of an acute exacerbation of asthma before deterioration. Valuable time is frequently lost, sometimes resulting in a fatality before the emergency help becomes available. Institution of an early treatment, sometimes the simple inhalational therapy, is generally adequate to abort an attack.

There of course, is no excuse for a physician or even a general practitioner not to know of asthma management. Although prolonged, the management of asthma fortunately does not involve the highly costly therapies except on rare occasions. Factually, the guidelines - directed treatment proves to be fairly cost-effective.

Quality of life

The most important objective of asthma management is the maintenance of a normal QOL without disability as one would expect without the disease in a normal, healthy person. The health related quality of life (HRQoL) in asthma can be assessed by either a generic or a disease-specific instrument. Several generic HRQoL instruments are available for common use but have limited utility in being unable to detect small and specific changes due to asthma[12,15-17]. The AQLQ is a commonly employed tool for QOL in asthma. The AQLQ is a 32-equally weighted item instrument in four main domains of QOL. The Mini AQLQ is a shorter and simpler version with only 15 items and a two-week recall. A few examples of the use of these tests are also available in some earlier studies from India[15-17]. The English version of AQLQ has been previously validated in India[16]. Recently, the Hindi version of Mini AQLQ was validated for use with a better acceptance rate, a moderate good discriminative but relatively poor evaluative power[17]. The observation that the correlation of HRQoL measures with spirometry is poor in most of the reported studies only points to the need of evaluation of QOL in asthma separately from other control measures and routine monitoring with pulmonary function tests.

How to care for asthma?

The next obvious issue is how to appropriately improve the asthma management and the quality of life of patients with asthma. It is true that the patients' and their families' knowledge about the disease and its management strategies will help several such plans such as the self-care manuals, and individualized written home management plans. The disease control must not involve unnecessary limitations, for example, on foods, exercises, sports, other recreational activities and child-bearing. These all are achievable goals provided the treatment is appropriately guided and controlled. It should not be forgotten that several of the top achievers in sports, arts and science have also suffered from asthma. Standardized treatment approaches based on evidence based guidelines have been advocated to reduce the disparities and fill the gaps in the treatment plans. The National Asthma Education Program (NAEP) and the Global Initiative Against Asthma (GINA) provide comprehensive guidelines which constitute the core standards for asthma management[10]. The guidelines developed under the WHO-GOI Programme based on the GINA recommendations can form the standard of care for primary care facilities in India.

Guidelines for management and other educational plans have been tried with varying levels of success

in small sample groups. More importantly, it is the implementation of standard treatment guidelines (STG) and the availability of quality asthma medication as per the STG at all levels of health care which are crucial for improvement in asthma care delivery. Such an effort has to be undertaken at the national level to effectively control the problem and reduce the health care burden due to asthma.

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