An audit of the management of asthma in an urban health centr in Yeme

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Summar

This full audit cycle which was undertaken in a church run healt centre in the Middle East demonstrates an encouraging potential fo improvement of the treatment of asthma.

Cultural and economic factors are significant barriers t implementing and maintaining change

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Introductio

This audit was undertaken while working in a mainl nurse-run Primary Care Health Centre in the Republi of Yemen as a volunteer doctor. My job consisted no only of seeing patients myself but also of conductin regular teaching sessions for the medical staff o relevant topics in the form of lunchtime conferences.

The idea to audit the management of asthma wa prompted by the large number of bottles wit Salbutamol syrup in the adjacent pharmacy. I coul only think of very exceptional circumstances for thos to be prescribed to patients and wondered what th treatment of asthma was like

The patients were entitled to get free medical care an basic medication after initial registration for a smal annual fee. Repeat prescriptions for chronic disease were issued on a monthly basis

To complete the audit cycle possible changes wer suggested and implemented after the initial evaluatio which were then re-audited two months later

Audit criteria and standards (Table 1

The audit criteria were based on the publishe guidelines for the UK [1-]

Table 1. Audit criteria and standard

Criterio	Standar
1. Monitoring and recording of chest findings and Peak Flo	At least 75% of patients should have their chest findings recorded and their Peak Flow checked at least once in a one month period
2. Prescription of PRN salbutamol inhale	At least 75% of patients with asthma should be prescribed a salbutamol inhale
3. Prescription of regular inhaled steroid	At least 75% of patients who require treatment beyond the occasional salbutamol inhaler should be prescribed steroid inhaler
4. Use of antibiotic	Not more than 10% of patients with asthma should be prescribed an antibiotic within a period of one month
5. Use of long-term oral steroid	Not more than 10% of patients with asthma should be on long-term oral steroids

The standards were set taking into account tha prescribing in a poor country has to face difficultie unknown elsewhere

Method

First, a period of one month prior to my arrival wa audited (15/08/2000 - 14/09/2000) by finding th notes of patients with asthma who were treated fo this condition in the set period of time. The results o this first audit were discussed in a meeting with al clinic staff and the treatment guidelines for asthm were introduced to them. The audit cycle was the completed for the period from 15/11/2000 14/12/2000 using the same criteria and standards an looking at those patients who had been included in th first stage of the audit

Result

13 patients (three school children, four adult female and six adult males).with asthma were treated in bot periods of time. There was a marked improvement o the management of asthma [Figure 1]. The standard were met in all but two criteria which were th documentation of the Peak Flow and the prescriptio of inhaled steroids, but even in these criteri improvements were achieved

Discussio

A doctor working in a developing country i confronted with different challenges and obstacle than a UK based doctor [4]

Lack of education of health care professional

The nurses tried their best to treat the patients bu they were unaware, for instance, of the adverse effect of long-term oral steroids. They overestimated th role of antibiotics and did not know how to check patient's peak flow correctly. However, they were ver keen to update their knowledge and the results of th audit confirms that the changes suggested were indee put into practice. Effective staff training should b team-based, non-patronizing and enjoyable in order t introduce and maintain changes. The lunchtim conferences involved the whole team and I attempte to make them enjoyable and non-patronising

Cultural barriers of patient

One problem was that inhalers were not very wel accepted by our patients. Most of them thought tha tablets (or even better, injections) were superior to an topical treatment. Compared to a steroid inhaler however, the salbutamol inhaler was more readil accepted as it brings instant relief. This over relianc on oral rather than inhaled therapy and underuse o prophylactic medication was noted by Watson in survey of expatriate doctors working in developin countries [4]

Another problem was the administration of inhale drugs to those unable to acquire a proper inhale technique, as spacer devices or special inhalers wer not available. We were able to solve this problem a least partially by emphasizing a good inhale technique on each consultation and by self-designe spacers from empty plastic bottles which worke surprisingly well

The tutorial was not really successful in introducin peak flow recording as a diagnostic tool. It was indee nearly impossible to convince patients to blow as har as they could. They did not see any purpose in it, an at the best of times found it funny. Patient education i probably more difficult than staff education but can b just as effective once a trusting relationship has bee established. Patient education proved to be mor difficult than staff educatio

Lack of financial resource

The main problem was the cost of inhalers. It was no so much a problem with sabutamol, as we had donated stock of these in our pharmacy to give to poo patients, and also a generic salbutamol from Egyp was widely available at a reduced rate from outsid pharmacies. However, steroid inhalers were no available as cheap generics and therefore practicall unaffordable to the majority of our patients. W eventually managed to purchase a small number fro charity funds. This issue constitutes a challenge no only to the generosity of the individual but also to th marketing policies of drug companies.

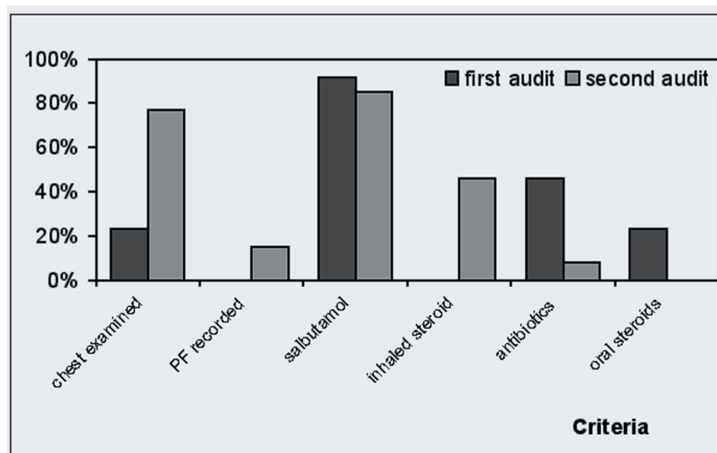

Figure 1. Graph to illustrate the standards achieved before and afte the educational interventio

Conclusio

Despite an encouraging potential for improvemen cultural and economic factors are significant barrier to implementing and maintaining change. Thes issues need to be understood and addressed if th standards of asthma care promoted by UK guideline are to be successfully introduced into developin countries. ■

Reference

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