



CARTAS AL DIRECTOR

Dispensing of antibiotics without a medical prescription and communication skills of pharmacists

Venta de antibióticos sin receta médica y habilidades comunicativas de los farmacéuticos

Sr. Director:

Consumption of antibiotics leads to emergence and selection of antimicrobial-resistant bacterial strains which have become a problem in most countries^{1,2}. Despite the fact that antibiotics are considered as prescription-only medicines, these drugs are often requested by and dispensed to patients without a medical prescription in many areas of the world. Despite being illegal, over-the-counter sales of antibiotics still occurs in Spain. The supply of an antibiotic from a pharmacy without a prescription involves a consultation with a pharmacist. From our experience, having good communication skills can help pharmacists to convince patients about the need for not taking some drugs customers ask for. However, research focusing on this aspect is lacking. A prospective study was performed in 2008 in a randomised sample of pharmacies in Catalonia³. Antibiotics were obtained without a medical prescription in 45.2% of the pharmacies surveyed. This study aimed to determine whether pharmacists who sell antibiotics without a prescription have different communication skills from those who refuse to sell them. The methodology of the study has been described elsewhere³. Two actors presented three different cases (sore throat, acute bronchitis, and urinary tract infection) in a sample of 197 pharmacies and asked pharmacists for an antibiotic without a medical prescription. In case that pharmacists refused to sell them the actors collected information about the type of reasons given. A response was considered administrative if the reason given only referred to the regulations or law in that, without a prescription the antibiotic could not be sold. A health-related point of view or comprehensive reason involved the response that it is not good for your health to sell you this medication or antibiotics cannot be given for viral infections or that selling an antibiotic in this case could lead to the spread of drug resistance. The specific skills check-off list evaluated by the simulated patients consisted of nine items, described in **table 1**, with

Table 1 List of the communication skills evaluated by simulated patients.

Professional appearance, good hygiene, attire and overall appearance is professional, demonstrates professional posture
Listens attentively without interrupting, maintains appropriate eye contact throughout the visit
Cordiality, smiles, provides a good reception
Respect, shows respect and avoids speaking in hostile and condescending manner
Tranquility, serene, quiet with emotional control
Optimism, looks for the positive sides of situations, attempts to give encouragement to the patient
Interest, demonstrates interest in the opinions, beliefs, values, concerns and emotions of the patient
Understandable expression, uses lay language when speaking to patients
Empathy, displays empathy and sensitivity appropriate for the context, takes part in the emotions of the patient, such as pain, anxiety or joy, and tries to overturn them

each ranging from 0 (worst) to 10 (best). The sum of the different items was taken into account.

Information about communication skills was obtained in 195 pharmacies (99%). Of the 108 pharmacies which did not sell antibiotics, 51 pharmacists claimed purely administrative reasons for not selling the drug (47.2%). In the remaining 57 pharmacies, a reasoned and comprehensive response related to health or drug resistance was given (52.8%). The overall mean score of the communication skills was 64.3 ($SD = 6.8$), being significantly higher among those pharmacists who refused to sell antibiotics compared to those who did sell them (65.4 vs. 63.1; $p < 0.05$). Differences were observed in listening, cordiality, tranquility, optimism, and intelligible expression. Among law-abiding pharmacists, the overall mean score observed among those who only gave administrative reasons for not selling antibiotics was significantly lower than those with a reasoned response (61.5 vs. 68.8; $p < 0.001$).

The importance of communication skills for pharmacists has been acknowledged in other papers^{4,5}. However, to our knowledge this is the first report demonstrating that communication skills are slightly better among law-abiding pharmacists, but more importantly, those who only give

administrative reasons for not selling antibiotics rate much lower than those who provide an explanation and sound reasoning for their refusal. This paper has practice implications. There is no doubt that effective communication is an important skill for all health professionals. On the basis of the results of this study it is important to carry out studies to determine whether teaching of communication skills addressed to pharmacists enables them to communicate more effectively and confidently. It should also be evaluated whether a teaching program could lead to a reduction in antibiotics sold in pharmacies in areas where over-the-counter sale of antibiotics is still permitted.

Funding body and role

The Catalonian Society of Family Medicine funded this work. The funder had no involvement in the design and conduct of the study.

Conflict of interest

There are no conflicts of interest to declare.

Acknowledgement

We wish to thank the actors who participated in this study for their valuable contribution to the field work of this study.

The Barcelona College of Pharmacists has been informed about this study.

References

1. Hawkey PM. Action against antibiotic resistance; no time to lose. *Lancet*. 1998;351:1298–9.
2. Goossens H, Ferech M, Stichele RV, Elseviers M. Outpatient antibiotic use in Europe and association with resistance: a cross-national database study. *Lancet*. 2005;365:579–87.
3. Llor C, Cots JM. The sale of antibiotics without prescription in pharmacies in Catalonia, Spain. *Clin Infect Dis*. 2009;48:1345–9.
4. Greenhill N, Anderson C, Avery A, Pilnick A. Analysis of pharmacist-patient communication using the Calgary-Cambridge guide. *Patient Educ Couns*. 2011;83:423–31.
5. Hargie OD, Morrow NC, Woodman C. Pharmacists' evaluation of key communication skills in practice. *Patient Educ Couns*. 2000;39:61–70.

Carles Llor^{a,*}, Josep Maria Cots^b

^a Primary Healthcare Centre Jaume I, Universitat Rovira i Virgili, Tarragona, Spain

^b Primary Healthcare Centre La Marina, Universitat de Barcelona, Barcelona, Spain

* Corresponding author.

E-mail address: carles.llor@urv.cat (C. Llor).

<http://dx.doi.org/10.1016/j.aprim.2013.02.004>

Evidencias disponibles sobre las propiedades médicas del calzado tipo Masai

Available evidence on the medical properties of Masai type footwear

Las Masai en duda

La consulta de atención primaria, como primer nivel asistencial, permite la detección precoz de conductas inadecuadas en relación con la salud, así como problemas que aparecen por actividades o usos que inicialmente se suponen saludables y que pueden no serlo.

La reciente observación en nuestro centro de 3 pacientes con tendinitis y dolores de extremidades inferiores, que tenían en común el uso de unas populares zapatillas de suela redondeada, nos ha llevado a revisar las evidencias existentes.

Las llamadas Masai (shape-ups, toning shoes) son unas deportivas con suela especial que fueron inventadas en 1990 por Karl Muller, un biomecánico suizo. Pretenden cambiar la manera en que una persona camina, reforzando grupos musculares diferentes a los habituales, como al caminar descalzo (como los Masai). Además, al crear inestabilidad postural, forzarían a los músculos a hacer un esfuerzo mayor y los fabricantes dijeron que favorecían la pérdida de peso,

mejoraban la postura y daban un mayor tono muscular de extremidades inferiores y nalgas. En 1996 se inició su comercialización en Suiza, extendiéndose rápidamente a todo el mundo¹.

Uno de los principales fabricantes, Skechers, decidió pagar recientemente 40 millones de dólares en reclamaciones a consumidores por el contencioso que tiene la marca con la Comisión Federal de Comercio de Estados Unidos, y así no continuar con el proceso judicial que tenía en marcha por supuesta publicidad engañosa. El acuerdo prohíbe que en sus anuncios vuelva a mencionar que su calzado favorece el fortalecimiento muscular, la pérdida de peso o cualquier otro beneficio relacionado con la salud o el estado físico². Este acuerdo judicial llega después del acordado en el 2011 con Reebok que aceptó pagar 25 millones de dólares en reembolsos a sus clientes³.

En un estudio del año 2010, con amplia repercusión en Estados Unidos, financiado por The American Council of Exercise (ACE) y realizado por la Universidad de Wisconsin La Crosse, se compararon entre 2 grupos de 12 mujeres cada uno de edades entre 19 y 27 años, uno con calzado deportivo y otro con calzado tipo shape-ups. Valoraron el consumo de oxígeno, la frecuencia cardíaca, el consumo energético, el cansancio percibido y la actividad muscular en 6 grupos musculares diferentes. No hubo diferencias significativas entre los 2 grupos en ninguno de los parámetros⁴.

En la literatura científica encontramos diversos estudios, siempre con grupos muy reducidos de pacientes. En el estu-