



Trends in the Use of Prescription Antibiotics and Other Medications in Gastroenteritis Pediatric Patients in Punjab, Pakistan

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SUMMARY. Inappropriate prescribing among pediatric patients is a recognized worldwide problem of the health care delivery system. The aim of the present research work was to evaluate the prescribing trends of antibiotics and other medications in gastroenteritis pediatric patients in Punjab, Pakistan. A retrospective study was carried out over a six-month period (August 1, 2018 to February 28, 2019) at two tertiary care hospitals in Punjab, Pakistan (Allied Hospital Faisalabad and Children Hospital Multan). A total of 600 pediatric patients were included, among them 300 from the Allied hospital Faisalabad and 300 from the children hospital Multan, Pakistan were included, in whom antibiotics and other medications were prescribed at the time of admission. The diarrhoea and fever occurred in all pediatric patients, 459 (91.8%) of patients experienced vomiting complaints, 324 (64.8%) of patients experienced abdominal cramps, and 421 (84.2%) of children had bloating. The 26.8 % pediatric patients received amoxicillin and clavulonic acid, 2.8 % pediatric patients prescribed azithromycin, 17.8 % received cefixime, clarithromycin was prescribed to the 20.2 % pediatric and 27.8 % pediatric patients received ceftriaxone. All pediatric patients were prescribed antipyretics, 456 (91.2%) patients received an anti-diarrheal, an antiemetic was administered to 387 (77.4%) patients, 479 (95.8%) patients received antispasmodic, total parenteral nutrition (TPN) was administered to 289 (57.8%) patients. Among all antibiotics, amoxicillin and clavulanic ($p = 0.017$), cephadrine ($p = 0.023$) cefixime ($p = 0.002$), ceftriaxone ($p = 0.003$), clarithromycin ($p = 0.234$) and azithromycin ($p = 0.012$) were received by pediatric patients. The p values of antiprotozoal, antiemetics and antispasmodic were less than 0.05, what indicates the results were statistically significant.

RESUMEN. La prescripción inadecuada entre pacientes pediátricos es un problema mundial reconocido del sistema de prestación de asistencia sanitaria. El objetivo del presente trabajo de investigación fue evaluar las tendencias de prescripción de antibióticos y otros medicamentos en pacientes pediátricos con gastroenteritis en Punjab, Pakistán. Se realizó un estudio retrospectivo durante un período de seis meses (del 1 de agosto de 2018 al 28 de febrero de 2019) en dos hospitales de atención terciaria en Punjab, Pakistán (Allied Hospital Faisalabad y Children Hospital Multan). Se incluyeron un total de 600 pacientes pediátricos, entre ellos 300 del hospital aliado Faisalabad y 300 del hospital infantil Multan, Pakistán, en los que se prescribieron antibióticos y otros medicamentos al momento del ingreso. La diarrea y la fiebre ocurrieron en todos los pacientes pediátricos, 459 (91.8%) de los pacientes experimentaron quejas de vómitos, 324 (64.8%) experimentaron calambres abdominales y 421 (84.2%) de los niños tenían hinchazón. El 26.8% de los pacientes pediátricos recibieron amoxicilina y ácido clavulónico, el 2.8% de los pacientes pediátricos recetaron azitromicina, el 17.8% recibieron cefixima, la claritromicina se prescribió al 20.2% y el 27.8% de los pacientes pediátricos recibieron ceftriaxona. A todos los pacientes pediátricos se les recetaron antipiréticos, 456 (91.2%) pacientes recibieron un antidiarreico, se administró un antiemético a 387 (77.4%) pacientes, 479 (95.8%) pacientes recibieron antiespasmódicos y se administró nutrición parenteral total (TPN) a 289 (57.8%) pacientes. Entre todos los antibióticos, amoxicilina y clavulánico ($p = 0.017$), cefradina ($p = 0.023$), cefixima ($p = 0.002$), ceftriaxona ($p = 0.003$), claritromicina ($p = 0.234$) y azitromicina ($p = 0.012$) fueron recibidos por los pacientes. Los valores de p de antiprotozoarios, antieméticos y antiespasmódicos fueron inferiores a 0,05, lo que indica que los resultados fueron estadísticamente significativos.

KEY WORDS: antibiotics, gastroenteritis, pediatric, prescription pattern.

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