Medication Use in Schools

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This article serves as a Position Statement of the Pediatric Pharmacy Association (PPA), which supports safe and effective medication use in schools. PPA recommends that schools develop comprehensive medication use policies to support safe and appropriate administration of both chronic and emergency medication in schools. These policies must address issues specific to pediatric patients, including off-label and over-the-counter medication use, various pediatric dosage forms, as well as appropriate medication storage, administration, and disposal practices. PPA also advocates for continued staff development and education regarding laws, regulations, and policies surrounding medication use in school to ensure safe and effective care of children and adolescents in the school setting.

ABBREVIATION PPA, Pediatric Pharmacy Association

KEYWORDS medication; pediatrics; school; self-administration; stock medication

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Background

Medication administration in schools is often necessary to meet the needs of students because 27% of children have chronic health conditions and 20% of children in the United States have special health care needs including medical, behavioral, or developmental conditions.^{1,2} In addition, some children may have undiagnosed or untreated conditions that may require the administration of emergency medication before emergency medical services arrive. Data in health care settings have demonstrated that children are at increased risk for medication errors compared with adults.^{3,4} The risk of medication errors in the school setting may be further increased if appropriate policies, procedures, or trained personnel are lacking.^{5–8} Reduction of nursing staff in schools has led many states to institute regulations allowing other non-licensed school personnel (e.g., health aides, teachers, administrative office staff) to administer medications with appropriate training. However, the Institute for Safe Medication Practices reported up to a three-fold increase in medication errors when unlicensed assistive personnel administer medications in place of a school nurse.⁹ This highlights the importance of professional guided training for unlicensed assistive personnel who may be asked to perform medication related tasks in the school setting when licensed health care personnel are not readily available.

Medication administration in the school setting is increasing in its complexity, enhancing the need for guidance and support of licensed and non-licensed school health staff pertaining to the safe and effective use of medication in children. Several professional organizations and entities including the American Academy

of Pediatrics, National Association of School Nurses, and Centers for Disease Control and Prevention have provided general guidance statements regarding medication use in schools as well as overall school health programs.^{5–8} These guidance statements outline the essential components that school policies and procedures should address, including the following: medication handling processes, types of medications that may be given (e.g., over-the-counter medications), delegation of medication administration responsibilities, self-carrying and self-administration of medication, confidentiality of medical information, and staff training or education.^{6,7} The Pediatric Pharmacy Association (PPA) supports the statements from these organizations, and on a broader scale, strives to address the challenges of medication use in schools and advocate for legislation and policies that ensure consistent, safe, and effective medication use in this setting. The Table presents a summary of PPA's recommendations.

Recommendations

Each school or school district has a comprehensive medication use policy in place that addresses all aspects of both emergent and chronic medication use during school and at school-sponsored activities. The policy should not just address the use of prescription medications but should also address the use of off-label as well as over-the-counter and complementary alternative medicines during the school day. Standardized documentation forms (e.g., forms for prescribers, consent by parents/legal guardians) and medication administration logs should be included to ensure consistency in documentation. The policy should require that individualized care plans be completed for students

Table. Recommendations of the Pediatric Pharmacy Association for Medication Use in Schools

Each school or school district should have comprehensive medication use policies in place for medication use during school and school-sponsored activities.

School administration should provide continuing education and evaluation of competency of personnel responsible for medication use in schools.

Schools, parents/caregivers, and health care professionals, should establish partnerships with effective communication in order to provide safe and effective use of medication in schools.

Each school or school district's medication use policies should address chronic, emergency, and over-the-counter medications.

Pharmacists should be familiar with laws and legislation related to medication use in schools and advocate for safe and effective medication use in school policies and practices in their communities.

who require medication administration throughout the school day or in emergencies. In addition, it should clearly describe the self-carry/self-administration policy and should include any requirements necessary for a student to be approved to self-carry as well as a process for reporting and documenting doses that have been self-administered. Medication error prevention strategies such as timetables for the periodic review of medication administration records, effective communication tools for individual health plans, school policies, etc., and plans for maintaining up-to-date allergy and medication lists should also be included. School personnel should be well trained to identify and respond to medical emergencies and thoroughly educated about their role in the medication use process. The medication use policy should describe the process for identifying personnel who are legally able and personally willing to assist with medication administration when needed. Those identified should receive additional ongoing and professionally guided training regarding their expanded involvement with medication administration. Finally, there should be a section of the policy that addresses safe medication storage and disposal and appropriate storage and disposal of student medication records to ensure student confidentiality. School administrators and staff may wish to seek additional expertise or interprofessional guidance regarding the development of appropriate policies from professional organizations, nearby pediatric hospitals, or colleges of pharmacy, medicine, or nursing.

School administration should provide continuing education and evaluation of competency of personnel responsible for medication use in schools. Development of such educational and training programs should be a collaborative effort between school district health staff (e.g., medical director, district school nurse), school staff, and parent/guardian representatives to account for various perspectives in the process. Education programs should incorporate interprofessional expertise whenever possible. Many professional organizations have resources and educational materials available to assist with staff education. Components of personnel education should include but are not limited to the following: state laws regarding delegation of duties and scope of practice, school-specific policies and proce-

dures, general knowledge of common health conditions and pediatric emergencies (e.g., asthma, anaphylaxis), and general medication administration skills including single-dose and/or emergency medication administration. Continuing education and renewed competencies are also recommended to keep personnel up to date given the dynamic nature of health care and frequent changes in policies.

Partnerships between schools, parents/caregivers, and health care professionals, are fundamental for safe and effective use of medication in schools. Clinicians who provide care to children should encourage and support this partnership by assessing the need for and providing documentation for schools (e.g., 504 plans, Individualized Education Program) as part of patient care visits. It is recommended that individual health plans (e.g., asthma action plan, allergy anaphylaxis plans) be collected and reviewed by designated school personnel at the start of each school year and with any changes that occur throughout a given school year. School staff can assist parents by notifying them of school documentation requirements prior to the start of school, sending communication tools throughout the year to capture any changes to allergy lists or medication doses, and sending reminders when medication refills are needed. Engaging students' parents/caregivers in these processes is fundamental. Without their engagement, successful development and communication of health plans cannot occur and may leave school personnel without the needed guidance to optimize health outcomes.

The use of chronic or maintenance medication in school should be addressed within the school's overall medication use policy. PPA recognizes that administration of maintenance medications for chronic conditions may be needed during the school day. This may be due to the required timing of certain medications, such as pancreatic enzymes, or to improve adherence, as with the supervision of asthma controller medications. Individualized care plans should be completed for any student who requires the administration of maintenance medication while in school.

Pediatric clinicians, including pharmacists in ambulatory care settings should help promote and assist with the development of these individual emergency action

plans including safe and effective use of emergency medications in the school setting. PPA understands that regardless of the particular emergency being addressed, several essential pieces need to be in place for a meaningful impact on emergencies in schools. First and foremost is for each school district to develop policies that address self-carrying and/or self-administration of emergency medication (including defining when a given student is capable of self-carry and/or self-administration), the stocking of undesignated supplies of certain emergent medications, and per state laws, which medications may be given by the school nurse versus designated trained personnel. It is imperative that all school employees receive training on how to recognize the early signs and symptoms of common pediatric emergencies. Schools should develop general action plans for common emergencies such as anaphylaxis, asthma exacerbation, hypoglycemia, opioid overdose, and seizures. Each student with a pre-existing diagnosis increasing their risk for one of these events should have a personal supply of medication available at school and an individualized emergency action plan on file with the school health staff. It is important for pediatric primary care providers to promote and assist with the development of these individual emergency action plans.

Pharmacists should be familiar with laws and legislation related to medication use in schools and advocate for safe and effective medication use in school policies and practices in their communities. PPA recognizes the importance of key stakeholders, including school administration, health personnel, staff, and community health care professionals being aware of current policies and legislation pertaining to medication use in schools. Laws pertaining to medication in schools, such as those allowing or requiring schools to keep undesignated stock of medications or those placing limitations on who may administer medications by different routes, can vary significantly from state to state and are constantly evolving. It is critical that school policies and education of personnel be updated when changes occur. Pharmacists' awareness of updated laws and legislation pertaining to school access to medications is also important and should be included as part of professional development and offered as continuing education programming whenever possible. For example, they should be aware that some states permit pharmacies to dispense medication to a given school for stock medication use (e.g., stock rescue inhaler and/or epinephrine pen programs). The incorporation of medication management in schools is lacking in many pharmacy school curricula.¹⁰ Given that many medications that are used in schools come from the community pharmacy setting, it would be pertinent for pharmacy students to gain exposure regarding medication use in schools through didactic training and/or experiential activities.

Conclusion

As pediatric pharmacists and health care professionals, PPA supports schools in their efforts to improve responses to medical emergencies and advocate for the health and well-being of students across the nation. PPA recommends the development and use of comprehensive policies and processes regarding medication use in schools because they are fundamental to ensuring safe and effective care of children in the school setting. As part of these policies, the defined education, training, and required competencies of school staff can help optimize health outcomes and minimize risk for medication-related errors. PPA recommends that pharmacists be familiar with current laws, legislation, and policies related to medication use in schools, as an important part of pharmacists' professional development and practice. PPA recognizes that pharmacists' medication expertise can help support schools in their endeavors to minimize risk for medication-related errors and provide safe and effective care to students.

ARTICLE INFORMATION

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