

VISOKA ZDRAVSTVENA ŠOLA V CELJU

DIPLOMSKO DELO

NAPAKE MEDICINSKIH SESTER PRI APLIKACIJI ZDRAVIL

NURSES' ERRORS IN MEDICATION ADMINISTRATION

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POVZETEK

Uvod: Napake medicinskih sester pri aplikaciji zdravil so ena izmed najpogostejših napak, pri kateri lahko pacient utрпи nepopravljivo škodo. Želeli smo ugotoviti, v kolikšni meri prihaja do napak zaradi prepisovanja aplicirane terapije ter kako si medicinske sestre pomagajo pri iskanju generičnih zdravil.

Metode dela: Uporabili smo kvalitativno in kvantitativno paradigmo raziskovanja ter metodo deskripcije. Podatke smo pridobili s pomočjo analize dokumentacij pacientov ter tehnike anketiranja. Na oddelku A smo s pomočjo strukturiranega obrazca pregledali 30 dokumentacij pacientov in primerjali skladnost predpisanih zdravil na temperaturnem listu s prepisom in potrditvijo aplikacije na obrazcu aplicirane terapije. Na oddelku B smo prav tako pregledali 30 dokumentacij pacientov in ugotavljali delež skladno zabeležene aplicirane terapije na temperaturnem listu, saj obrazcev aplicirane terapije ne uporabljajo. Na oddelku A smo merili čas za prepis terapije iz temperaturnega lista na obrazec aplicirane terapije. Na obeh oddelkih smo pri pregledu predpisanih zdravil na temperaturnem listu, ugotavljali delež apliciranih generičnih zdravil. Za pridobitev podatkov, na kakšen način si medicinske sestre pomagajo pri iskanju generičnih zdravil, smo na obeh oddelkih razdelili skupno 45 vprašalnikov. Realizacija vzorca je bila 100 %.

Rezultati: V 30 dokumentacijah oddelka A je bilo skupno število predpisanih zdravil na temperaturnem listu 275. Aplikacija terapije je bila z imenom zdravila, predpisanim na temperaturnem listu, odmerkom, uro in parafo na obrazec aplicirane terapije prepisana in potrjena v 52,7 %. V 47,3 % aplikacija zdravila ni bila zavedena na obrazec aplicirane terapije z uro in parafo izvajalca. Izmed ugotovljenih 47,3 % neskladno zavedenih aplikacij na obrazcu aplicirane terapije smo v nadaljevanju ugotovili najpogostejša neskladja med zapisom na temperaturnem listu in obrazcem aplicirane terapije. V 63,8 % je bil prepis zdravila skladen, ni pa bila zabeležena aplikacija zdravila z uro in parafo medicinske sestre, v 18,5 % je bila ob pravilnem prepisu imena zdravila zabeležen pravilen odmerek. V 8,5 % je bilo zdravilo ukinjeno na temperaturnem listu, ne pa tudi na obrazcu aplicirane terapije, kjer je bila aplikacija potrjena z uro in parafo. V 5,4 % zdravilo ni bilo prepisano iz temperaturnega lista na obrazec aplicirane terapije, v 3,8 % pa je bila na obrazcu aplicirane terapije vpisana samo ura, brez parafe izvajalca. Enako število dokumentacij pacientov je bilo pregledano na oddelku B, kjer je bilo skupno število predpisanih zdravil na temperaturnem listu 194. Aplikacijo predpisanega zdravila so na temperaturni list, z uro in parafo medicinske sestre potrdile v 89,2 %. Hi-kvadrat test z Yatesovim popravkom je pokazal, da prihaja med oddelkoma A in B do statistično pomembnih razlik pri potrditvi aplikacije zdravil. Medicinska sestra porabi za prepis ali pregled predpisane terapije iz temperaturnega lista na obrazec aplicirane terapije za enega pacienta v povprečju 3,2 minute. Vse medicinske sestre si pri iskanju paralel pomagajo z registrom zdravil, do katerega najpogosteje dostopajo preko mobilnega telefona.

Razprava in sklep: Raziskava je pokazala, da je na oddelku A zaradi prepisa terapije iz temperaturnega lista na obrazec aplicirane terapije storjenih več napak. Medicinske sestre so zaradi dnevnega usklajevanja predpisane in prepisane terapije bolj obremenjene in posledično naredijo več napak. Razvidno je, da na obeh oddelkih uporabljajo register zdravil, saj je delež apliciranih generičnih zdravil razmeroma velik. Na oddelku A bi bilo treba opustiti sistem prepisovanja terapije in prevzeti sistem potrditve aplikacije zdravila z uro in parafo medicinske sestre na temperaturno listo. S tem bi izboljšali pregled nad aplicirano terapijo in zmanjšali število napak. Največ bi k večji varnosti prispevala elektronska temperaturna lista, kjer bi bilo predpisano le zdravilo, ki je trenutno na zalogi, poleg tega bi aplikacijo zabeležili kar v informacijski sistem.

Ključne besede: zdravila, napake, aplikacija, medicinska sestra.

SUMMARY

Introduction: Nurses' errors in medication administration are among the most frequent mistakes from which a patient can suffer irreversible damage. This is why we wanted to find out to what extent errors regarding the copying of an administered therapy occur and how nurses help themselves in the search of interchangeable medicines.

Methods: The qualitative and quantitative research paradigm as well as the description method were used. The data was collected by means of analyzing the patients' documentation and by means of the technique of survey. In ward A, we checked 30 examples of patients' documentation by means of a structured form and compared the conformity of the prescribed medication on the temperature chart with the copy and the confirmation of the administration on the form of the applied therapy. In ward B, we checked 30 examples of patients' documentation as well and tried to establish the percentage of accordingly recorded therapy on the temperature chart because forms of the applied therapy are not used. In ward A we measured the time used for copying the therapy from the temperature chart to the form of the applied therapy. In both wards, when checking the prescribed medication on the temperature chart, we tried to establish the percentage of applied generic drugs. In order to gather information on how nurses help themselves in the search of generic drugs, we distributed 45 questionnaires in both wards. The response rate was 100 %.

Results: In 30 examples of documentation in ward A, the total amount of prescribed medicines on the temperature chart was 275. Administration of the therapy was copied and confirmed with the name of the medicine, prescribed on the temperature chart, the dosage, the time and the initialling onto the form of the administered therapy in 52.7 %. In 47.3 % the application of the drug was not registered on the form of the applied therapy by means of time and initialling. Among the 47.3 % of inappropriately made applications on the form of the applied therapy, we further established the most frequent inconsistencies between the record on the temperature chart and the form of the applied therapy. In 63.8 %, the copy of the medicine was in accordance, however there was no record of medication administration with the time and the nurse's initialling, in 18.5 % the correct dosage of the medicine was added to the correct copy of its name. In 8.5 % the medicine was cancelled on the temperature chart but not on the form of the administered therapy, where the administration was confirmed by means of time and the nurse's initialling. In 5.4 % the drug was not copied from the temperature chart onto the form of applied therapy, and in 3.8 % the form of applied therapy had a record of the time only, without any initialling. The same number of examples of patients' documentation was checked in ward B, where the total amount of prescribed medicines on the temperature chart was 194. Administration of the medicine was confirmed by the nurses by means of time and initialling in 89.2 %. The chi-squared test with Yates' correction showed that there are statistically important differences in the confirmation of medication administration between wards A and B. A nurse needs on average 3.2 minutes per patient for copying or checking the prescribed therapy from the temperature chart onto the form

of the administered therapy. All nurses look for parallels in the drug registry which they most frequently access via phone.

Discussion and conclusion: The research showed that more errors owing to copying the therapy from the temperature chart onto the form of the administered therapy occurred in ward A. Nurses are overloaded due to the daily co-ordination of prescribed and copied therapy and thus make more mistakes. It is evident that in both wards the recommended drug registries are in use as the percentage of administered generic drugs is relatively high. In ward A the system of copying the therapy should be omitted and the system of confirming administration of the medicine with the time and the nurse's initialling onto the temperature chart should be taken over instead. Thus the transparency of the administered therapy could improve and the number of mistakes could decrease. The biggest contribution to safety would be an electronic temperature chart with only that medicine prescribed which is on stock at that time, and the administration should be entered into the information system.

Keywords: medicines, errors, medication administration, nurse