RINGKASAN

Air merupakan kebutuhan yang mutlak diperlukan oleh manusia, hewan dan tumbuhan. Air dimanfaatkan manusia untuk berbagai keperluan hidup. Adapun persyaratan mikrobiologi air ditentukan oleh ada atau tidaknya mikroorganisme yang patogen.

Secara epidemiologis, ada keterkaitan yang erat antara masalah air minum dengan penyakit, khusunya penyakit yang ditularkan melalui air (*water borne disease*), seperti diare, kolera, disentri dan beberapa penyakit lainnya. Air minum dapat terkontaminasi oleh zat kimia, mikroba, dan materi berbahaya yang berpengaruh buruk terhadap kesehatan. Mikroba berbahaya meliputi bakteri, virus dan parasit.

Angka prevalensi diare di Kota Kupang 4,74 % pada tahun 2003. Di wilayah kerja Puskesmas Bakunase pada tiga tahun terkhir dengan rata-rata 1.554 kasus dengan angka prevalensi 4,82%.

Berdasarkan studi yang dilakukan oleh Dinas Kesehatan Kota Kupang pada tahun 2002 dari hasil sampel air bersih yang di periksa yang diambil dari sumber PMA, sumur gali dan sumur bor, yang memenuhi syarat sebanyak 17 %. Sampel air bersih yang memenuhi syarat tersebut lebih banyak berasal dari sumber air sumur bor yang didistribusikan melalui perpipaan (sambungan rumah).

Tujuan penelitian ini adalah untuk mengetahui kualitas bakteriologis air pada sumber air bersih yang digunakan oleh penduduk dan pada air minum di rumah tangga. Jenis penelitian ini obsevasional analitik yang bersifat komparatif yang ditinjau dari waktu pengambilan data adalah *Cross Sectional*. Populasi penelitian ini adalah semua keluarga yang menggunakan sarana air bersih dari sumur gali dan PMA di wilayah kerja Puskesmas Bakunase dan semua keluarga yang menggunakan sarana air bersih dari sumur bor di kelurahan Alak Kecamatan Alak. Sampel yang diambil secara *Simple random Sample* terhadap keluarga yang menggunakan sumber air dari sumur gali dan sumber PMA yang bertempat tinggal di wilayah kerja Puskesmas Bakunase Kecamatan Oebobo berjumlah sampel 113 keluarga dan akan dibandingkan dengan keluarga yang menggunakan sumber sumur bor yang bertempat tinggal di Kelurahan Alak Kecamatan Alak berjumlah sampel 80 keluarga.

Variabel yang berkaitan dengan penelitian ini adalah variabel seperti kejadian diare, umur, pekerjaan, tingkat pendidikan, tingkat pengetahuan istri tentang kesehatan dan tingkat pendapatan keluarga serta kualitas bakteriologis air sumber dan air minum.

Kualitas bakteriologis air pada sumber sumur dan pada air minum untuk parameter coliform maupun koli tinja berbeda bermakna secara statistic berdasarkan macam sumber air yang digunakan oleh responden.

Prevalensi diare di wilayah kerja Puskesmas Bakunase relative lebih tinggi (17.69 %) daripada di keluarahan Alak (2.50 %).

Macam sumber air bersih berdasarkan kualitas bakteriologis tidak berpengaruh terhadap kejadian diare. Hanya variabel faktor risiko kualitas bakteriologis air pada sumber untuk parameter coliform saja yang berpengaruh terhadap kejadian diare berdasarkan daerah penelitian.

Faktor-faktor risiko lain yang menyebabkan terjadinya diare perlu dilakukan penelitian kohor pada penduduk yang kualitas air pada sumber maupun pada air

minum kurang baik dan tidak memenuhi syarat kesehatan. Pemerintah yang terkait dengan kesehatan lingkungan harus segera melakukan monitoring secara rutin dan dapat mengambil tindakan-tindakan pencegahan dan penanggulangan kareana kecenderungan telah terjadi pencemaran pada air sumber dan air minum.

Penduduk di daerah penelitian khususnya penduduk di wilayah kerja Puskesmas Bakunase Kota Kupang juga harus ikut melakukan tindakan pencegahan dengan cara memperbaiki sarana air bersih, pemberian kaporit sesuai dosis, dan memasak air dengan sempurna serta menyimpannya pada tempat yang bersih dan secara benar.

SUMMARY

Water is the main necessity for man, animals, and plants. Man consumes water for their variety needs. Requirements of water microbiology are determined by the existing of pathogenic micro organism.

Epidemilogically, there is a correlation among drinking water and diseases, especially for the water borne diseases, such as diarrhea, cholera, dysentery, and many others. Chemicals, microbes and other dangerous substances can contaminate the drinking water. Bacteria, virus, and parasite are such the examples of those dangerous microbes.

The prevalence rate of diarrhea in Kupang is about 4.74 % in the year 2003. Puskesmas that there are 1554 cases occurred with the prevalent rate is about 4.82 %.

According to the research of Kupang's Health Service in 2002 there are only 17% of samples having proper criteria; the samples the water of PMA, dig well and drilled well. And the proper sample mostly come from dig well, distributed through the pipes (connecting the houses).

This research is simply proposed to identify the quality of bacteriological water, limitedly into clean water resources used by the people and also drinking water consumed in the household. This research type is analytic obsevasional having the character of comparability evaluated from time of data intake is Cross Sectional. This research population is all family using the clean water of well dig and PMA in the work territory of Puskesmas Bakunase and all family using the clean water of well drill in village of Alak of Subdistrict Alak. Sample taken by Simple is random Sample to family using source water from well dig and source PMA residing in the work territory of Puskesmas Bakunase of Subdistrict Oebobo amount to the sample 113 families and will be compared to by a family using well source drill residing in Village of Alak of Subdistrict Alak amount to the sample 80 families.

The variable are prevalence of diarrhea, age, occupation, education, level of wife's health knowledge, family income, and the quality of bacteriological water consumtion into water resources and drinking water.

Quality bakteriological water at well source and at drinking water for the arameter of coliform and coli faeces score differ to have a meaning of by statistic pursuant to kinds of water source used by responder.

Prevalensce of diarrhea in the work territory of Puskesmas Bakunase are (17.69 %) is relative hifher than in Alak village (2.50 %).

Kinds of clean water source pursuant to quality bakteriological do not have an effect on to diarrhea occurence. Only variable of factor of risk of quality bakteriological water at source for the parameter of just coliform having an effect on to diarrhea occurence of pursuant to research area.

Another research must be held to find the other factors causing diarrhea through the people whom consume both water resources and drinking water in improper criteria. The, government, especially the natural health service, must temporary observe this case and decide the preventing action, consider to the tendency of pollution into water resources and drinking water.

People in the research area, especially in the work territory of Puskesmas Bakunase, Kupang, must also do the preventing action; such as: repair the devices of

clean water, chlorinate water in a right dose, and also boil water then keep it in a hygienic place, with a right way.

ABSTRACT

The influence of some Clean Water Resources toward Diarrhea Prevalence in the work territory of Puskesmas Bakunase, Kecamatan Oebobo and Kelurahan Alak, Kecamatan Alak, Kupang.

The research was held in June 2005 to July 2005. It is simply proposed to identify the quality of bacteriological water, limitedly into the clean water resources used by the people and also drinking water consumed in the household. This Research type is analytic observational having the character of comparability evaluated from time of data intake is Cross Sectional. As population is all family using clean water. Sample taken by Simple is Random Sample to family using source water from well dig and source PMA residing in the work territory of Puskesmas Bakunase of Subdistrict Oebobo amount to the sample 113 families and will be compared to by a family using well source drill residing in Village of Alak of Subdistrict Alak amount to the sample 80 families.

The variable of the research are prevalence of diarrhea, occupation, education, the level of wife's health knowledge, family income, and also the quality of bacteriological water contained into water resources and drinking water.

Quality bacteriological water at well source and at drinking water for the parameter of coliform and coli faeces score differ to have a meaning of by statistic pursuant to kinds of water source used by responder.

Prevalence of diarrhea in the work territory of Puskesmas Bakunase are (17.69%) is relative higher than in Alak village (2.50 %).

Kinds of clean water source pursuant to quality bacteriological do not have an effect on to diarrhea occurrence. Only variable of factor of risk of quality bacteriological water at source for the parameter of just coliform having an effect on to diarrhea occurrence of pursuant to research area.

It is necessary to do cohort research to find another risk factors causing prevalence of diarrhea. The water pollution in the research area has already been consideration. Therefore, some temporally preventing and monitoring actions are required to solve those problems.

Keyword: diarrhea, some of clean water.