Fungsi ruang terbuka untuk kesehatan manusia di lingkungan permukiman padat = kasus pengaruh kondisi ruang terbuka hijau terhadap balita penderita infeksi saluran pernafasan akut di kelurahan Duripulo = The function of open space for human health in the densely populated urban settlement : case the effect of green open space condition to the acute respiratory infection of the children under five years old in Kampung Duripulo

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Abstrak

ABSTRACT
Kepadatan penduduk yang melampaui daya dukung lingkungan di kota, menyebabkan sejumlah masalah sosial, ekonomi, lingkungan, dan prasarana. Jumlah penduduk yang padat memberikan tekanan pada sumber-sumber yang terbatas di kota seperti tanah, kesempatan kerja, tersedianya potensi air bersih, sarana dan prasarana, serta ruang terbuka hijau. Akibatnya, ruang yang seharusnya dimanfaatkan untuk ruang terbuka hijau (RTH) dibangun guna memenuhi tuntutan pembangunan lain. RTH secara tidak langsung semakin menyempit yang dapat berakibat kualitas lingkungan menurun.

Berkurangnya RTH di wilayah perkotaan DKI dikatagorikan sudah cukup besar, yaitu 726,01 ha per tahun. Dengan semakin berkurangnya RTH akan menurunkan kualitas udara, dan ini akan menyebabkan penyakit yang disebabkan karena udara kotor. Penyakit yang diteliti adalah yang disebabkan oleh kondisi udara kotor di lingkungan permukiman padat, yaitu penyakit infeksi saluran pernafasan akut (ISPA). ISPA adalah penyebab nomor satu kesakitan pada bayi dan balita, dan menempati urutan teratas dalam statistik kesehatan. Kondisi udara kotor berkaitan Brat dengan kondisi tidak adanya atau kurangnya RTH.

Jumlah penderita ISPA di Kelurahan Duripulo termasuk yang tertinggi dibandingkan penyakit-penyakit yang ada, yaitu 28,35% (Laporan Tahunan Puskesmas Duripulo 1992). Kepadatan penduduk di Kelurahan Duripulo sebesar 522 jiwa/ha. Sedangkan ruang terbuka yang tersedia 0,15 m2/ jiwa, ini jauh lebih kecil dari standard kebutuhan RTH untuk lingkungan permukiman padat, yaitu 1,80 m2/jiwa.

Penelitian ini bertujuan untuk membuktikan pengaruh RTH terhadap kesehatan manusia di lingkungan permukiman padat, dengan tujuan khusus 1) meneliti pengaruh penggunaan RTH; 2) meneliti pengaruh jumlah dan jenis tanaman di dalam RTH; 3) meneliti pengaruh luas RTH; 4) meneliti pengaruh jarak RTH.

Penelitian dilaksanakan di Kelurahan Duripulo Kecamatan Gambir Wilayah Jakarta Pusat, selama 3 bulan dari oktober 1991 sampai Januari 1992. Kelurahan Duripulo memiliki jumlah penduduk 36.436 jiwa dengan luas area 70,70 ha, kepadatan penduduk 522 jiwa/ha, dan RTH yang tersedia 0,5 ha.

Penelitian ini bersifat deskriptif analitis dengan penentuan contoh secara merata. Jumlah responden sebanyak 100 KK diambil secara proporsional dari 4 RW. Data dikumpulkan dengan menggunakan

kuesioner, wawancara, dan pengamatan langsung di lapangan. Selanjutnya untuk melihat adanya hubungan antara luas dan keadaan RTH dengan jumlah balita penderita ISPA, digunakan analisis korelasi.

Hasil analisis statistik menunjukkan :
1. Penggunaan RTH berpengaruh terhadap kesehatan manusia. Uji korelasi antara penggunaan RTH dengan jumlah balita penderita ISPA menunjukkan adanya korelasi negatif yang nyata yaitu - 0,6573, berarti semakin banyak penggunaan RTH semakin kecil jumlah balita penderita ISPA. Hal ini dapat terlihat pada daerah kurang padat dengan penggunaan RTH besar yaitu 80% (RT 01, RW 10), jumlah balita penderita ISPA-nya kecil yaitu 33,33%.
Demikian pula pada daerah sangat padat dengan penggunaan RTH besar yaitu 60% (RT 02, RW 09), jumlah balita penderita ISPA-nya kecil yaitu 37,50%. Sedangkan pada daerah kurang padat dengan penggunaan RTH kecil yaitu 20% (RT 06, RW 11), jumlah balita penderita ISPA-nya besar yaitu 75%.
2. Jumlah dan jenis tanaman di dalam RTH berpengaruh terhadap kesehatan manusia. Dari uji korelasi antara jumlah dan jenis tanaman di dalam RTH dengan jumlah balita penderita ISPA menunjukkan adanya korelasi positif yang nyata yaitu + 0,7619, berarti semakin besar jumlah dan jenis tanaman di dalam RTH, semakin kecil jumlah balita penderita ISPA. Ini terbukti dari pengamatan di lapangan yaitu RT 08 RW 10 dengan derajat ketetapan tanaman sangat balk (4), jumlah balita penderita ISPA-nya rendah yaitu 37,50%. Sedangkan di RT 07 RW 05 dengan derajat ketetapan tanaman sedang (2), jumlah balita penderita ISPA-nya tinggi yaitu 71,43%.
3. Luas RTH berpengaruh terhadap kesehatan manusia.
Uji korelasi antara luas RTH dengan jumlah balita penderita ISPA menunjukkan adanya korelasi negatif yang nyata yaitu - 0,7903, berarti semakin luas RTH, semakin kecil jumlah balita penderita ISPA. Hal ini dapat terlihat dari wilayah dengan RTH yang luas dengan jumlah balita penderita ISPA-nya kecil, yaitu RT 08 RW 10 dengan luas RTH 297,81 m2 jumlah balita penderita ISPA-nya kecil yaitu 37,50%. Sedangkan di RT 01 RW 10 dengan luas RTH 374,72 m2, jumlah balita penderita ISPA-nya kecil yaitu 33,33%. Dan di RT 02 RW 09 dengan luas RTH 947,14 m2, jumlah balita penderita ISPA-nya kecil yaitu 37,50%. Adapun di RT 06 RW 11 dengan luas RTH kecil yaitu 144,49 m2, jumlah balita penderita ISPA-nya besar yaitu 75%.
4. Jarak RTH berpengaruh terhadap jumlah balita penderita ISPA.
Uji korelasi antara jarak RTH dengan jumlah balita penderita ISPA menunjukkan adanya korelasi positif yang nyata yaitu + 0,5234, berarti semakin dekat jarak RTH semakin kecil jumlah balita penderita ISPA, dan semakin jauh jarak RTH semakin besar jumlah balita penderita ISPA.

Hal ini dapat terlihat di daerah sangat padat dengan jarak RTH jauh (RT 06 RW 09), jumlah balita penderita ISPA-nya besar yaitu 66,67%. Sedangkan di daerah kurang padat dengan jarak RTH dekat (RT 05 RW 10), jumlah balita penderita ISPA-nya kecil yaitu 33,330. Demikian pula untuk daerah kurang padat dengan jarak RTH dekat (RT 06 RW 10) jumlah balita penderita ISPA nya kecil yaitu 33,33%.
<hr><i>ABSTRACT
Over population which exceeds beyond the carrying capacity in urban areas causes a number of problems in social economic, environment, and infra structure. Total number of the over population gives an emphasis on the limited city resources such as the land, job opportunity, fresh water supply, infra structure, and green open space. As the result, the area which should be used as a green open space have been converted to other

utilizations. The green open space indirectly becomes narrow can result from the declining quality of environment.

The declining of green open space in the cities of Jakarta is classified to be large enough, that is 726.01 ha/year. By declining of the green open space will de-crease the quality of air, and this will easily cause the disease. The disease which is being observed is caused by condition of filthy air in densely populated settlement, namely the Acute Respiratory Infection (ARI). ARI was the first cause of illnesses on babies and children (under five years old). It occupies as the hundredth level in health statistic.

Total number of people who ARI suffer at Kampung Duripulo was considered higher, if compared with other illnesses, that is 28.35%. The population density at Kampung Duripulo was 522 persons/ha. While the green open space area which was provided is0.15 m2/person, this was less than the standard need for densely populated settlement, that is 1.80 m2/person.

This research is meant to prove that there is an effect of the green open space for human health in densely populated settlement with special purpose, 1) to research the effect of green open space utilization on the total number of children ARI suffer, 2) to research the effect of total number and variety of plants in the green open space on the total number of children ARI suffer, 3) to research the effect of green open space width on the total number of children ARI suffer, 4) to research the effect of green open space distance on the total number of children ARI suffer.

This research was done at Kampung Duripulo Gambir District Central of Jakarta, for three months from October 1991 until January 1992. The total number of population is 36,436 persons and width area 70.7 ha, the population density was 522 persons/ha, and the green open space which was provided was 0.54 ha.

This research is a descriptive analysis by determination of the examples evenly. Total number of respondents as many as 100 chiefs of families were taken proportionally from 4 RW at Kampung Duripulo. The datas were collected by using questionnaire, interview, and direct observation in the area. Then to see whether there was a relation between the width and condition of the green open space on children ARI suffer, by using correlative analysis.

The result of the statistic analysis showed :
1. The green open space utilization effected to the human health. Correlative test between the utilization of green open space and total number of children ARI suffer, showed a real negative correlation there was -0,6573. Which meant that the more of green open space utilization, the total number of children ARI suffer becomes less.
This could be seen in the area which was less populated by using the green open space largely, namely 80% (RT 01 RW 10), the number of children ARI suffer was small, namely 33.33%. It also happened, in the densely populated area by using the green open space largely, namely 60% (RT 02 RW 09), the number of children ARI suffer was small, namely 37.50%. In the other area which was less populated by using the green open space smallish, namely 20% (RT 06 RW 11), the number of children ARI suffer was large, namely 75%.

2. The total number and variety of plants in the green open space effected to the human health. Correlative test between total number of vegetation in the green open space and the number of children ARI suffer, showed a real positive correlation there was + 0,7619. Which meant that the more of total number and variety of plants in the green open space largely, the total number of children ARI suffer becomes less. It was proved by the observation in the area, namely RT 08 RW 10 with a very good level of plant determination (4), the total number of children ARI suffer was low, namely 37.50%.
Whereas RT 07 RW 04 with a medium level of the plant determination (2), the total number of children ARI suffer was high, namely 71.43%.xvi
3. The width of green open space effected to the human health. Correlative test between the width of green open space and the number of children ARI suffer, showed a real negative correlation there was - 0,7903. Which meant that the more width of green open space, the total number of children ARI suffer becomes less. This could be seen in the RT 08 RW 10 with the width of green open space 297.81 in, the total number of children ARI suffer was small, namely 33.33%. And RT 02 RW 09 with the width of green open space 947.14 m2, total number of children ARI suffer was small, namely 37.50%.
Whereas RT 06 RW 11 with the width of green open space 144.49 m2, total number of children ARI suffer was high, namely 75%.
4. The distance of green open space effected to the human health. Correlative test between the distance of green open space and the total number of children ARI suffer, showed a real positive correlation there was + 0,5234. Which meant that the nearer of green open space, the total number of children ARI suffer becomes less. This could be seen in the densely populated area (RT 06 RW 09) with a distant of green open space, the total number of children ARI suffer was high, namely 66.67%. Whereas the less populated area with a near of green open space (RT 05 RW 10), the total number of children ARI suffer was small, namely 33.33%. It also happened in the less populated area with a near of green open space (RT 06 RW 10), total number of children ARI suffer was small, namely 33.33%.</i>