

## ABSTRACT

Skin health complaints is one of is one of the factors related to environmental health. Contaminated water trigger skin health complaint. Surabaya Jagir river used for toilet needs. A cause skin health complaint is the  $\text{NH}_3$ ,  $\text{NH}_3$  can increase the “irritant” that severity determined by the alkali. The objectives of this study was to identify the water quality and skin health complaints in communities around the river jagir village Ngagel Wonokromo district of Surabaya.

This study was an observational descriptive and *cross sectional* design. Subject were selected by *purposive sampling*. Samples are 78, this variable study is the chemical water river quality ( $\text{NH}_3$ ), respondent characteristics, social characteristics, personal hygiene and skin health complaints. Data were analyzed descriptively.

The average yield  $\text{NH}_3$  point 1: 0,00035 mg/L, point 2: 0,002 mg/L, and point 3: 0,000 mg/L, the respondents most aged 26-35, female, respondents work and not school, personal hygiene factor is less.

The most skin health complaints are complaints of itching,  $\text{NH}_3$  at the highest levels of 0.002 mg / L, age group 26-35, female, respondents who work and not school, as well as personal hygiene is less. Levels of  $\text{NH}_3$  a factor indicative of the occurrence of skin health complaints and a risk factor for skin health complaint to the respondents.

**Keywords:** water river chemical quality,  $\text{NH}_3$  levels, personal hygiene, skin health complaints