

CHAPTER III

METHODS

3.1. Research field

The fields of this research were Anatomical Pathology and epidemiological study.

3.2. Research location and periods

The research was conducted in Anatomical Pathology Laboratory of Kariadi Central Hospital / Medical Faculty Diponegoro University and Waspada Laboratory. HNC cases will be coded using combinations of International Classification of Diseases (ICD) codes (versions 7–10) and International Classification of Diseases for Oncology (ICD-O, versions 1–3). The periods of research were between February and June 2015.

3.3. Research design

This research was a retrospective observational descriptive study.

3.4 Population and Sample

3.4.1 Targeted Population

Targeted populations of this research were the medical records of Head and Neck Cancer Patients from Anatomical Pathology Laboratory of Kariadi Central Hospital / Medical Faculty Diponegoro University and Waspada Laboratory.

3.4.2 Accessible Population

Reached population of this research were taken from medical records of Head and Neck Cancer patients between 2010- 2014 based on anatomical pathology diagnoses in Anatomical Pathology Laboratory of Kariadi Central Hospital / Medical Faculty Diponegoro University and Waspada Laboratory.

3.4.3. Sample

Samples were taken from the accessible population which fulfilled the inclusion criteria.

3.4.3.1. Inclusion Criteria

Samples were taken with inclusion criteria i.e. medical records which diagnosed Head and Neck Cancer accompanied with data of sex and age of patient and addressed in Semarang and its surrounding area.

3.4.3.2. Exclusion Criteria

Incomplete medical records were excluded.

3.5. Operational Definition

Table 4. Operational Definition

No	Variable	Unit	Scale
1	<p>Head and Neck Cancer (HNC)</p> <p>Cancer diagnosis indicated on the medical records.</p> <p>Classification of Head and Neck Cancer is based on anatomic site.</p> <p>HNC cases were coded using combinations of International Classification of Diseases (ICD) codes (versions 7–10) and International Classification of Diseases for Oncology (ICD-O, versions 1–3).</p>		Nominal
2	<p>Age</p> <p>Age of patients diagnosed with head and neck cancer which shown on the medical records and categorized into several age groups</p>	Year	Ratio
3	<p>Sex</p> <p>Sex of patients diagnosed with head and neck cancer which shown on the medical records and categorized as male or female</p>		Nominal
4	<p>Address</p> <p>Address of patients diagnosed with Head and Neck Cancer is in Semarang or its surrounding area</p>		Nominal

5	ASR (Age Standardized Rates) Is calculated using direct method of standardization		Ratio
6	ASCAR (Age Standardized Cancer Ratio) Is analogous to direct standardization, which requires the selection of a set of standard age-specific proportions.		Ratio

3.6. Methods of Collecting Data

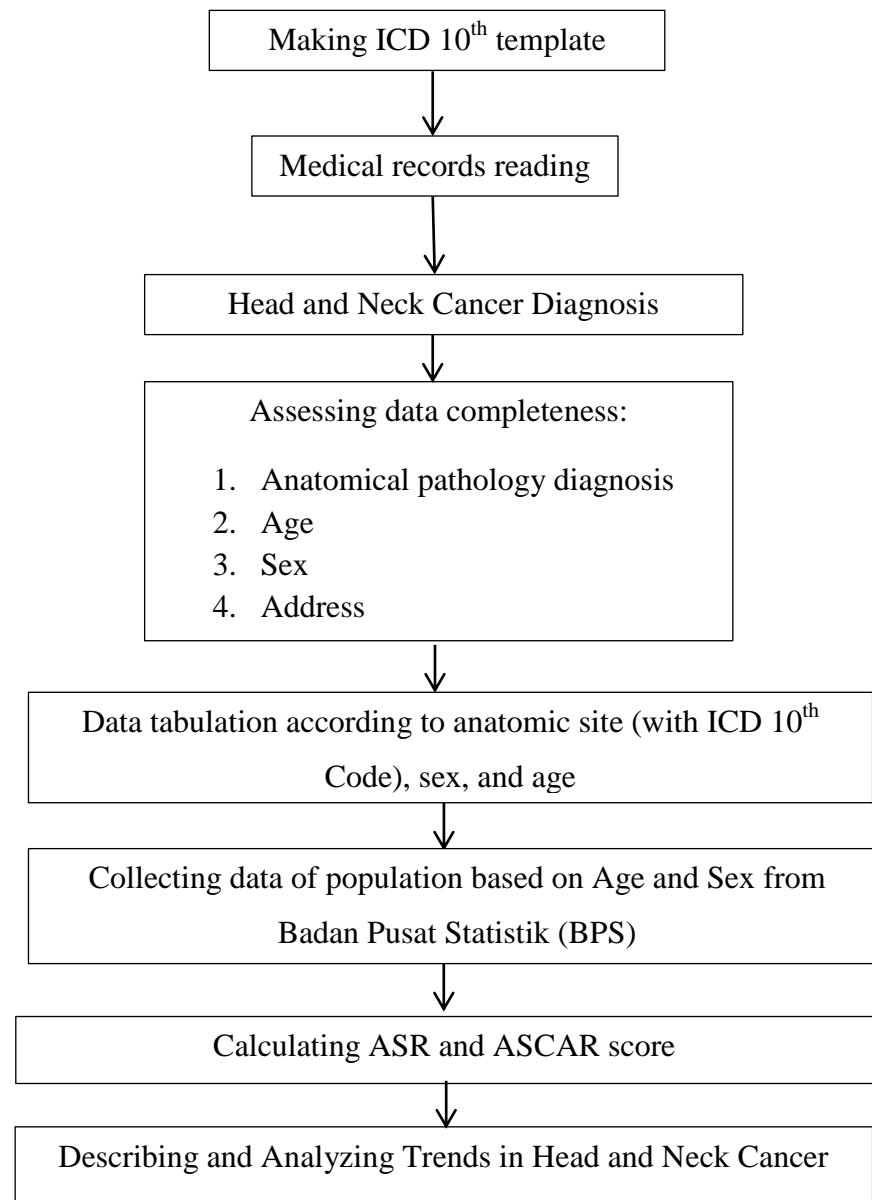
3.6.1. Material of Study

The materials of this study were secondary data from medical records which diagnose Head and Neck Cancer in 2010- 2014 in Anatomical Pathology Laboratory of Kariadi Central Hospital / Medical Faculty Diponegoro University and Waspada Laboratory which fulfilled the inclusion criteria.

This research focused in the incidence of Head and Neck Cancer in Semarang and surrounding areas, so it just recorded the incidence from 5 cities which mostly found in the medical records, which are city of Semarang, Semarang regency, Demak, Grobogan and Pemasang. Data for total population for each sex in the several age group used in this research were from Badan Pusat Statistik (BPS).

The standard population used in this research were from World Health Organization.

3.6.2. Research Protocol



3.6.3. Data Analysis

Collected data were tabulated manually using Microsoft Excel and analyzed and presented descriptively in table or graphic form. ASR and ASCR

were calculated using direct methods as the formula shown in chapter 2. The standard populations used in this research were from World Health Organization.

3.7. Ethical Clearance

All of data collections and research was done under permission of Health Research Bioethics Commission Faculty of Medicine Diponegoro University/ Kariadi General Hospital Semarang Indonesia.

3.8. Research Schedule

Table 5. Research Schedule

Activities	Dec	Jan	Feb	Mar	Apr	May	June	July
Arranging Research Proposal								
Research Proposal Presentation								
Research Preparation								
Collecting Data								
Tabulating Data								
Data Analysis								
Research Report								
Research Report Presentation								