Case Study- Does It Have Any Relevance Now

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A Case Report is a way of sharing information to the medical world about a rare or unreported feature, condition, complication, investigation or intervention of a patient or an anatomical variation by publishing it in a medical journal. Case report and case series describes the experience of one or more people with a disease. It is often the first data alerting a new disease. It has limitations as it is not a controlled or cohort study. Nowadays case reports publication has become an academic duty for the post graduate studies or as a self-study module for the undergraduate students. A case report provides important and detailed information about a disease which is often absent in large studies. Case reports serve as an early warning signal for the adverse effects of new medications, or the presentations of new and emerging diseases [1]. Every published case adds something new to already existing medical knowledge. Many case reports have become legendary as they offered new ideas for the management of already existing diseases or for new diseases. Case reports and case series are very sensitive in picking up fresh clinical material in a qualitative way but not specific for quantitative confirmation [2]. Compared to clinical or laboratory research case reports and case series are more formal and do not provide evidence with the same intensity. Case reports have low citation value and may have a negative impact on a journal's impact factor, so prevalence of case report papers published in high impact periodicals are on decline. In recent years case reports have become a casualty of the pursuit of the impact factor. The value of case reports may be misjudged compared to other publications that are more comprehensive and supported by evidence, but the impact of case reports has been remarkable. In fact, sharing such useful and trustworthy information has led to discoveries and the introduction of therapies for novel diseases. Research in medicine often starts with observations made during patient encounters. Each of us has an ethical responsibility to report our new discoveries and share our new knowledge with our peers. Well-written case reports are source of inspiration for all clinicians and scientists searching for new ideas about clinical care and scientific research [3]. Case reports are valuable resources of unusual information that may lead to new research and advances in clinical practice. Many journals and medical databases recognize the time-honoured importance of case reports as a valuable source of new ideas and information in clinical
Case reports, including a single case report, two case reports, or a case series have a time frame of citations shows that case reports have made a huge percentage in medical literature and grow rapidly with time [9]. Case reports, including a single case report, two case reports, or a case series have a time-honoured tradition. From Hippocrates (460 B.C. to 370 B.C.), and the times of papyrus that has the records of ancient Egyptian medicine (c. 1600 B.C.) to modern day, physicians have described interesting cases involving all specialties [10]. In 1817 James Parkinson reported an article with the title “An essay on the shaking palsy”, which lead to the discovery of the disease carrying the author’s name (Parkinson’s disease) [11]. Case reports reported that the anorexic agents, fenfluramine and dexfenfluramine produced primary pulmonary hypertension which led to trials that investigated the mechanism and incidence of primary pulmonary hypertension and the drugs was withdrawn from the market [12]. The fact that tobacco smoking caused lung cancer came from surgical patient series in the 1920s and 1930s; it was confirmed by case-control and cohort studies which came decades later [13]. A new entity ‘mitochondrial diabetes’-was found by the observation that in some family tree diabetes had a maternal inheritance, which lead to the discovery of its molecular mitochondrial basis. Over 100 years the AIDS virus affected people of in the central Africa. The AIDS disease was recognized only when the clinicians observed in the 'total immunodeficiency' in homosexual with no apparent reason for immunodeficiency [14]. Sometimes the discovery of therapeutic advances in medicine happens when unexpected side effects of a drug is reported. Hypoglycaemia in patients with infections who were treated with sulpha drugs led to the development of oral hypoglycaemics.

Side effects of some drugs produce diseases that were previously non-existent or unrecognized. For example, specific forms of valvopathy with slimming drugs, or retrolental fibroplasia [2]. Sudden deaths occurred during or immediately after intravenous infusion of high dosages of an anti-emetic, domperidone. More deaths were reposted independently by physicians due to intractable arrhythmias following domperidone injection. The intravenous form was withdrawn from the market [15]. Congenital rubella syndrome was identified when a causal link was found between a severe epidemic of rubella and infants born with congenital cataracts and cardiac abnormalities in Australia in 1941. A case of pulmonary embolism in a 40-year-old pre-menopausal woman, five weeks after taking an oral contraceptive (OC) to treat endometriosis was reported. More detailed studies have consistently shown that there is an association between the use of OCs and the risk of pulmonary embolism. Dr. Jones first published his paper entitled "The Diagnosis of Rheumatic Fever." which is taken as standardized
diagnostic criteria for Rheumatic Fever. Without standardized criteria the rheumatic fever might have missed in many patients. The importance of case report is increasing as new diseases can be observed and characteristics of this disease can be reported in detail in the format of case report. When a new clinical feature of a disease or a new illness is detected it must be reported first in the case report format. As more similar diseases are detected then the studies develop to more sophisticated designs, like controlled study, cohort research or clinical trial.

REFERENCES