

History of Science and Medicine

George Nicholas Papanicolaou

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PAP smears are not pap talks! They are taken seriously not only by pathologists and gynecologists but also by lay public particularly women. Thanks to George Nicholas Papanicolaou who created awareness among medical and lay community about the importance of simple smear cytological examination in prediction and prevention of cancer. Although Papanicolaou's work had been largely confined to the female genital tract smears examination, his work no doubt sparked the interest in other areas of the body. Exfoliative cytology of other organs, touch cytology and even Fine Needle Aspiration Cytology owe its popularity and its service to the humanity to some extent on Papanicolaou who significantly contributed to make cytology a popular discipline. Papanicolaou comes from the land of earlier sciences i.e. Greece. However he was quite different from earlier Greek scientists who were mostly philosophers who did little hard work in laboratory sciences. It were Muslims who actually founded the laboratory sciences through their zeal for understanding and hard work sparked by constant encouragement of Quran-e-Majeed and the teachings of the Prophet Muhammad (PBUH) on learning from birth to grave.

Papanicolaou's contribution has led to tremendous popularity of cytology saving numerous patients from pain and misery. Earlier diagnosis of cancer without much pain and sweat not only saves patient from anxiety and anguish but also protects patients from physical trauma of surgery in many cases. Early detection of carcinoma lead to better management and frees patients from devastation of infiltrating and widespread disease and its required

managements.

Papanicolaou moved to USA, where he found perfect place to grow. Initially without much knowledge of English, he and his wife had to do ordinary works, which luckily in USA did not carry much taboos. Soon however he found job in pathology department from where his real career began. His experimental work on animal vaginal smears on assessment of hormonal influence led to his subsequent human work, where vaginal smears revealed some atypical cells in patients with uterine cancer. This was the biggest thrill of his life and led him to work on this aspect of cytological smears. In collaboration with other scientists like Herbert F. Traut, gynecologist, who appreciated his work.

Papanicolaou's hard work has led to the conception that the cancer can be caught in the bud saving patients from miseries. The concept of "Intraepithelial Neoplasia from mild dysplasia to severe dysplasia and carcinoma in situ" is now applicable to almost all body systems. There is no doubt about the acceptance of the conception of Pre-invasive malignancies and the need to diagnose and eliminate them by all.

Papanicolaou, although a very hardworking person contributed his achievements to "luck". But what is luck? It is indeed Allah's way to guide people to the right tract whenever in His plan, information has to be bestowed upon mankind. This reminds us the Quranic verse in which Allah has said that no one can encompass knowledge without His leave or permission.