

LETTER to the EDITOR

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Rationale of Establishment of Adolescents and Young Adult Multidisciplinary Team (AYA MDT) Tumor Board in Pakistan

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Dear Editor

Adolescents and young adults (AYA) aged between 15-39 years diagnosed with cancer represent a unique category of patients within oncology. The distribution of cancer types as shown in Figure 1 is different with the most common tumors (accounting for 86% of cancers) in the age range being breast cancer, thyroid carcinoma, testicular cancer, melanoma [1] compared to small cell tumors in children and carcinoma in older adults. Early detection, referral, and treatment can be challenging due to the rarity of cancer in this age group, the variety of cancers, and the variety of symptoms that can appear. When compared to children and older people, there is evidence that this age group has inferior results due to limited access to clinical trials, delayed diagnosis, adverse cancer biology, and a lack of specialized supportive care [2].

One of the several reasons given for the lack of advancement was the relatively low number of patients who participated in clinical trials, leaving researchers with little tumor specimens to work with. Numerous other variables, such as variations in host and disease biology, delayed diagnosis, distinct treatment modalities, low therapeutic compliance, and particularly psychological and economic concerns, all contribute to the worse prognosis of AYA oncology patients [3].

AYA patients must undergo evaluations at medical facilities with extensive experience in managing cancer in this patient population. Young cancer patients have distinctive needs since their emotional, social, spiritual, and cognitive development is still in early stages, specialists must treat them as unique individuals and evaluate their specific needs. Recognizing this age group’s needs is critical to their future development and, consequently, to their quality of life [4]. Additionally, these facilities should have access to supportive care services, such as psychosocial and educational support and fertility

preservation tailored to the AYA population, as well as medical subspecialty services appropriate for the patient’s cancer diagnosis.

The Management of all adolescent and young adults with cancer should be addressed in both tumor site-specific MDT meetings and tumor boards specified for this age, which can be called AYA -MDT, comprising of the pediatric and adult oncologist, pathologist/cytogeneticist; radiologist; surgeon; neurosurgeon; clinical oncologist; pediatric hematologist; key worker; specialist nurses; nurses for inpatient care and day care; specialist pharmacist; palliative care specialists; activities coordinators/ youth workers; psychological services; appropriate allied health professionals, e.g. physiotherapists; teachers; social worker; and specialist outreach nurses [2].

Between 2011-2013, a prospective cohort study was conducted by Bernig T et al. in which AYA who presented with a newly diagnosed or relapsed malignancy were treated interdisciplinarily by pediatric and adult oncologists. The patients and their relatives reflected a high satisfaction with the offered novel health care approach [5]. The AYA unit’s multidisciplinary team, life-affirming atmosphere, and involvement of parents from the start improved age-specific needs for treatment. Social workers and psychologists provided psychological support and helped AYA with non-medical issues like education and career. The pediatric nurses’ professionalism made it easier for them to care for older AYA with cancer. This approach ensures better understanding and support for AYA.

The NCCN Guidelines for Adolescent and Young Adult (AYA) Oncology [6] provide supportive care guidelines rather than cancer management protocols. AYA patients have fewer comorbid conditions, therefore they may be able to tolerate more intensive therapies, which some older adults may not be able to tolerate. These

New Cancer Cases, 2023

Estimated New Cancers Among AYAs in the U.S. in 2023	85,980
% of All New Cancer Cases at Any Age	4.4%

Common Types of New Cancers Among AYAs

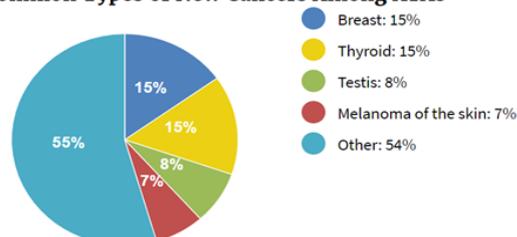


Figure 1. Distribution based on Age-Adjusted Rates of New Cases SEER 22, 2016-202

recommendations aim to recognize and raise awareness of the unique challenges in AYA oncology providing pertinent analytical information, highlighting resources available to the AYA population, and offering suggestions for patient treatment. AYA cancer patients should be understood as a separate age group with particular medical and psychological requirements.

MDT meetings are crucial in quality treatment of cancer patients because professionals with expertise in different fields complement one another's understanding of cases [7]. A site-specific surgical team conducting complex oncological surgeries cannot function efficiently without expert medical and radiation oncology teams as most malignant tumors are best managed by multiple treatment modalities [8]. Creating a multidisciplinary culture by collaborating with different disciplines can address specific age-related, clinical, physical, psychosocial, and practical demands in young cancer patients

Conclusively, a multidisciplinary team with different specialties are required to treat cancer in adolescent and young adults for better prognosis in Pakistan. Furthermore, AYA population should be strongly encouraged to participate in tumor banking, biologic protocols, and clinical trials to ensure their survival, health, welfare, and positive contribution to society

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