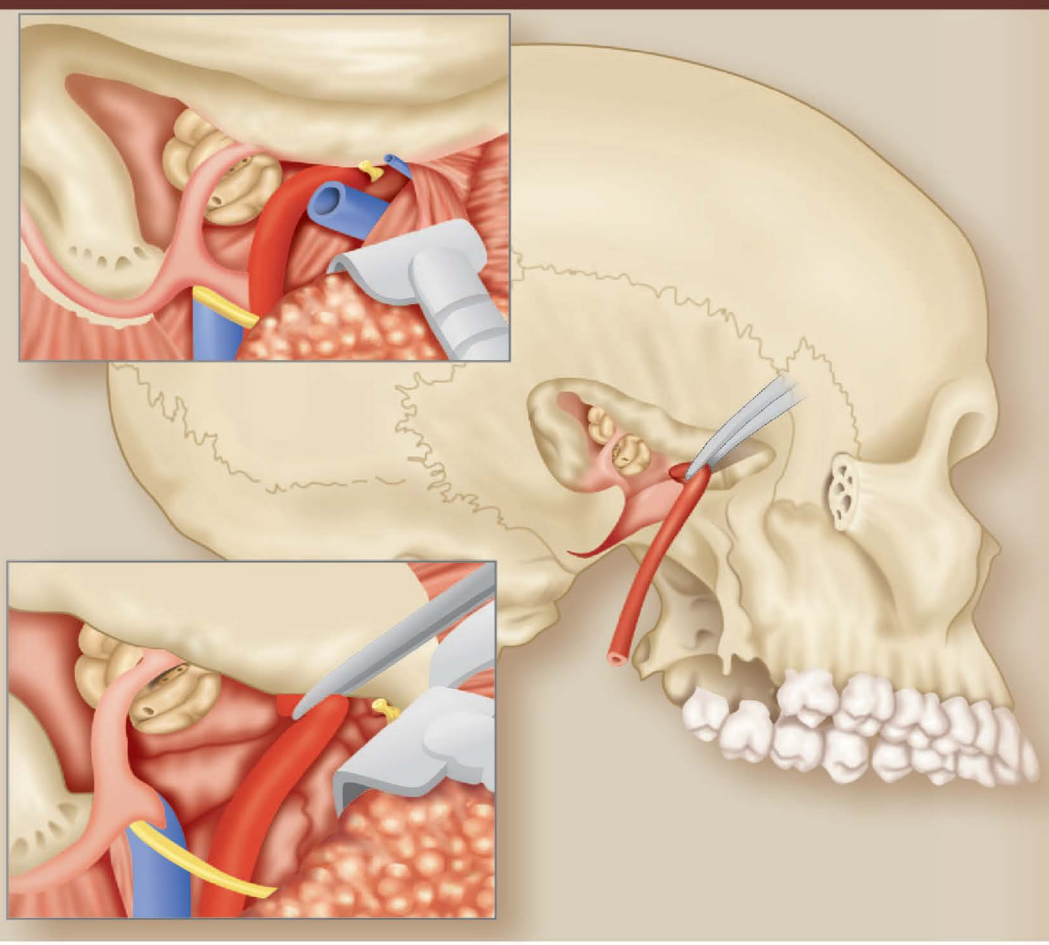
com, for detailed information on oncology books, visit our website www.jaypeebrothers.com, for detailed information on oncology book

Celebrating 50 years
Passion, Quality and Innovation in Healthcare Publishing

Comprehensive Management of HEAD and NECK CANCER



Editors
Narayana Subramaniam
Sivakumar Vidhyadharan
Samskruthi P Murthy

Foreword & Preface
Subramania Iyer & N Gopalakrishna Iyer

JAYPEE

Contents

1. **Head and Neck Cancer Treatment: Past, Present and Future 1**
   Vijay Pillai

SECTION 1 PRETREATMENT ASSESSMENT AND EVALUATION

2. **Radiological Evaluation of Head and Neck Cancer 11**
   Gaurav Sundar

3. **Pathology of Head and Neck Tumors 23**
   Nikita Oza, Narayana Subramaniam

4. **Psycho-oncology and Pretreatment Counseling in Head and Neck Cancer 30**
   Soudhamini Shastry

5. **Preoperative Assessment and Anesthetic Considerations in Head and Neck Cancer Surgery 38**
   Shabala Paul, Narayana Subramaniam

6. **Nutritional Assessment and Considerations in Head and Neck Cancer Therapy 51**
   Pranothi Srinivasalu, Narayana Subramaniam

SECTION 2 MANAGEMENT OF HEAD AND NECK CANCER

7. **Strategies in Oral Cancer Prevention 59**
   Shashikant Limbachiya, Samskruthi P Murthy, Narayana Subramaniam, Sivakumar Vidhyadharan

8. **Premalignant Lesions of the Larynx 77**
   Shashikant Limbachiya, Samskruthi P Murthy, Narayana Subramaniam, Sivakumar Vidhyadharan

9. **Management of the Neck 82**
   Akshat Malik, Aseem Mishra, Samskruthi P Murthy, Narayana Subramaniam, Sivakumar Vidhyadharan

10. **Carcinoma of Unknown Primary 94**
    Naveen BS, Sivakumar Vidhyadharan, Samskruthi P Murthy, Narayana Subramaniam

11. **Cancers of the Oral Cavity 102**
    Narayana Subramaniam, Samskruthi P Murthy, Sivakumar Vidhyadharan

12. **Cancers of the Oropharynx 125**
    Samskruthi P Murthy, Sivakumar Vidhyadharan, Narayana Subramaniam

13. Cancers of the Larynx 149
Sivakumar Vidhyadharan, Narayana Subramaniam, Samskruthi P Murthy

14. Cancers of the Hypopharynx 175
Sivakumar Vidhyadharan, Samskruthi P Murthy, Narayana Subramaniam

15. Cancers of the Nasal Cavity and Vestibule 191
Adharsh Anand, Sivakumar Vidhyadharan, Narayana Subramaniam, Samskruthi P Murthy

16. Cancers of the Paranasal Sinuses and Anterior Skull Base 197
Narayana Subramaniam, Sivakumar Vidhyadharan, Samskruthi P Murthy

17. Cancers of the Nasopharynx 219
Vivek Shetty, Saurabha Kumar, Narayana Subramaniam

18. Cancers of the Temporal Bone 229
Vidya Bhushan R, Narayana Subramaniam, Samskruthi P Murthy, Sivakumar Vidhyadharan

19. Tumors of the Salivary Glands 237
Federico Bolognesi, Narayana Subramaniam, Samskruthi P Murthy, Sivakumar Vidhyadharan

20. Paragangliomas and Neurogenic Tumors of the Head and Neck 262
Athira Ramakrishnan, Sivakumar Vidhyadharan, Samskruthi P Murthy, Narayana Subramaniam

21. Melanomas of the Head and Neck 273
Samskruthi P Murthy, Sivakumar Vidhyadharan, Narayana Subramaniam

22. Nonmelanoma Skin Cancers of the Head and Neck 284
Samskruthi P Murthy, Sivakumar Vidhyadharan, Narayana Subramaniam

23. Thyroid Malignancies 299
Samskruthi P Murthy, Sivakumar Vidhyadharan, Narayana Subramaniam

24. Disorders of the Parathyroid Gland 342
Samskruthi P Murthy, Sivakumar Vidhyadharan, Narayana Subramaniam

25. Sarcomas of the Head and Neck 358
Vidita Powle, Narayana Subramaniam, Samskruthi P Murthy, Sivakumar Vidhyadharan

26. Radiotherapy in Head and Neck Cancer 372
Vinay Kumar, Suman Bhasker

27. Tracheal Malignancies 382
Dinesh MG, Samskruthi P Murthy, Narayana Subramaniam, Sivakumar Vidhyadharan

28. Multidisciplinary Management of Unresectable Head and Neck Cancer 390
Manish Mair, Hitesh Singhavi, Narayana Subramaniam

29. Management of Recurrent and Metastatic Head and Neck Cancer 396
Vijay Kumar Srinivasalu, Narayana Subramaniam, Sivakumar Vidhyadharan, Samskruthi P Murthy

30. Head and Neck Cancer Management in the Geriatric Patient 407
Manish Mair, Hitesh Singhavi, Narayana Subramaniam

31. Molecular Biology of Head and Neck Cancer 417
Vijay Kumar Srinivasalu, Narayana Subramaniam, Sivakumar Vidhyadharan, Samskruthi P Murthy

32. Personalized Medicine in Head and Neck Cancer Therapy 424
Vineeth Sukrithan

33. Nuclear Medicine in Head and Neck Cancer 430
Smitha Chinmay Kulkarni, Samskruthi P Murthy

34. Robotic Surgery in Head and Neck Cancer 440
Sivakumar Vidhyadharan, Narayana Subramaniam, Samskruthi P Murthy

SECTION 3 MANAGEMENT OF TUMOR-LIKE LESIONS OF THE HEAD AND NECK

35. Odontogenic Lesions and Tumors 461
Sushma Mehta, Narayana Subramaniam, Samskruthi P Murthy, Sivakumar Vidhyadharan

36. Vascular Malformations of the Head and Neck 471
Radhika Kapahtia, Sivakumar Vidhyadharan, Narayana Subramaniam, Samskruthi P Murthy

SECTION 4 RECONSTRUCTION IN HEAD AND NECK CANCER

37. Microvascular Reconstruction in Head and Neck Cancer: Principles, Practice and Commonly Used Free Flaps 481
Narayana Subramaniam, Samskruthi P Murthy, Sivakumar Vidhyadharan

38. Principles of Oral Cavity Reconstruction 499
Radhika Kapahtia, Narayana Subramaniam, Sivakumar Vidhyadharan, Samskruthi P Murthy

39. Principles of Skull Base Reconstruction 514
Radhika Kapahtia, Narayana Subramaniam, Sivakumar Vidhyadharan, Samskruthi P Murthy

40. Principles of Pharyngeal and Tracheal Reconstruction 520
Dimpy Sharma, Narayana Subramaniam, Sivakumar Vidhyadharan, Samskruthi P Murthy

41. Facial Nerve Disorders and their Management in Head and Neck Cancer 529
Dimpy Sharma, Federico Bolognesi, Narayana Subramaniam, Federico Biglioli

SECTION 5 POST-TREATMENT CARE AND REHABILITATION

42. Swallowing Rehabilitation in Head and Neck Cancer 547
Smita Mathias, Sivakumar Vidhyadharan, Narayana Subramaniam

43. Rehabilitation of Trismus, Lymphedema, Shoulder Dysfunction and Vocal Cord Palsy 562
Samskruthi P Murthy, Trupti Kolur, Sivakumar Vidhyadharan, Narayana Subramaniam

44. Principles of Dental Oncology and Maxillofacial Prosthodontics 578
Trupti Kolur, PC Jacob

45. Management of Pain and Palliative Care in Head and Neck Cancer 586
Shabala Paul, Narayana Subramaniam

46. Survivorship and Quality of Life in Head and Neck Cancer 592
Samskruthi P Murthy, Sivakumar Vidhyadharan, Narayana Subramaniam

Index 601

CHAPTER 4

Psycho-oncology and Pretreatment Counseling in Head and Neck Cancer

Soudhamini Shastry

JAYPEE BROTHERS

INTRODUCTION

Dealing with mental health is a sensitive, integral aspect of care of patients with head and neck cancer. If mental health problems go untreated, patients' adherence to treatment, rehabilitation times, and risk of suicide may all be affected.

Assessment of psychological problems, differentiating "normal" from "abnormal" reactions, deciding when to refer to psychiatric services—while these tasks seem challenging at first, it helps to remember that being an attentive, empathic listener is a good place to start.

Additionally, positive treatment experience built on a good rapport with the treating team contributes to building resilience among patients—both survivors who experience remission, as well as the less fortunate patients facing prospects of palliation.

PRETREATMENT PSYCHOLOGICAL ASSESSMENT

Receiving the diagnosis of cancer or the news of its relapse can be a considerable source of stress;[1] patients understandably go through a difficult time, experiencing a mixture of emotions and thoughts. Specifically, the management of head and neck cancer may involve procedures that result in noticeable scars/disfigurement and difficulties with essential bodily functions such as swallowing and speech.[2]

An Austrian study found that oncologists were not very good at identifying their patients' emotional distress and need for counseling; unfortunately, this was worse among doctors treating patients with head and neck cancer.[3]

The Edmonton Symptom Assessment System[4] (ESAS; **Fig. 1**) is a scale that screens for symptoms routinely seen in patients with cancer, particularly those receiving palliative care. The Hospital Anxiety and Depression Scale[5] (HADS; **Fig. 2**) is a psychometric scale that was designed to measure the severity of psychiatric symptoms, for use specifically in nonpsychiatric hospital settings. Such tools possess the advantage of objectivity to an extent, but often, they require clinical expertise to interpret results meaningfully.[6]

A past history or family history of psychiatric illness and suicidal attempts can provide clues to the patient's coping reserve and current psychological state. Understandably, patients with the personality trait of health anxiety (existent prior to receiving cancer diagnosis) may face considerable anxiety/fear of cancer recurrence after treatment.

Even if mental health issues are not severe enough to warrant a formal psychiatric referral, it is prudent to record baseline and periodic assessments of mental state.

Depression, Anxiety and Adjustment Disorders

Depression, anxiety and adjustment disorders are commonly encountered psychiatric disorders in patients with cancer, with a prevalence of about 30–40% in hospital settings.[7] Remarkably, depression has been reported to be more prevalent in patients with head and neck cancers than in other types of cancer, perhaps partly due to reasons discussed in the previous section.[8]

Depression independently worsens morbidity and elevates mortality in patients with cancer,[9] an effect observed in other physical illnesses such as heart disease[10] and stroke[11] as well.

The International Statistical Classification of Diseases and Related Health Problems 10th Revision (ICD-10) diagnostic criteria used to diagnose depression are fairly straightforward **(Box 1)**.

The ICD-10 subdivides *anxiety disorders* into generalized anxiety disorder, panic disorder, phobic disorders, etc. (please refer the ICD-10 DCR for the diagnostic criteria of the individual conditions.)

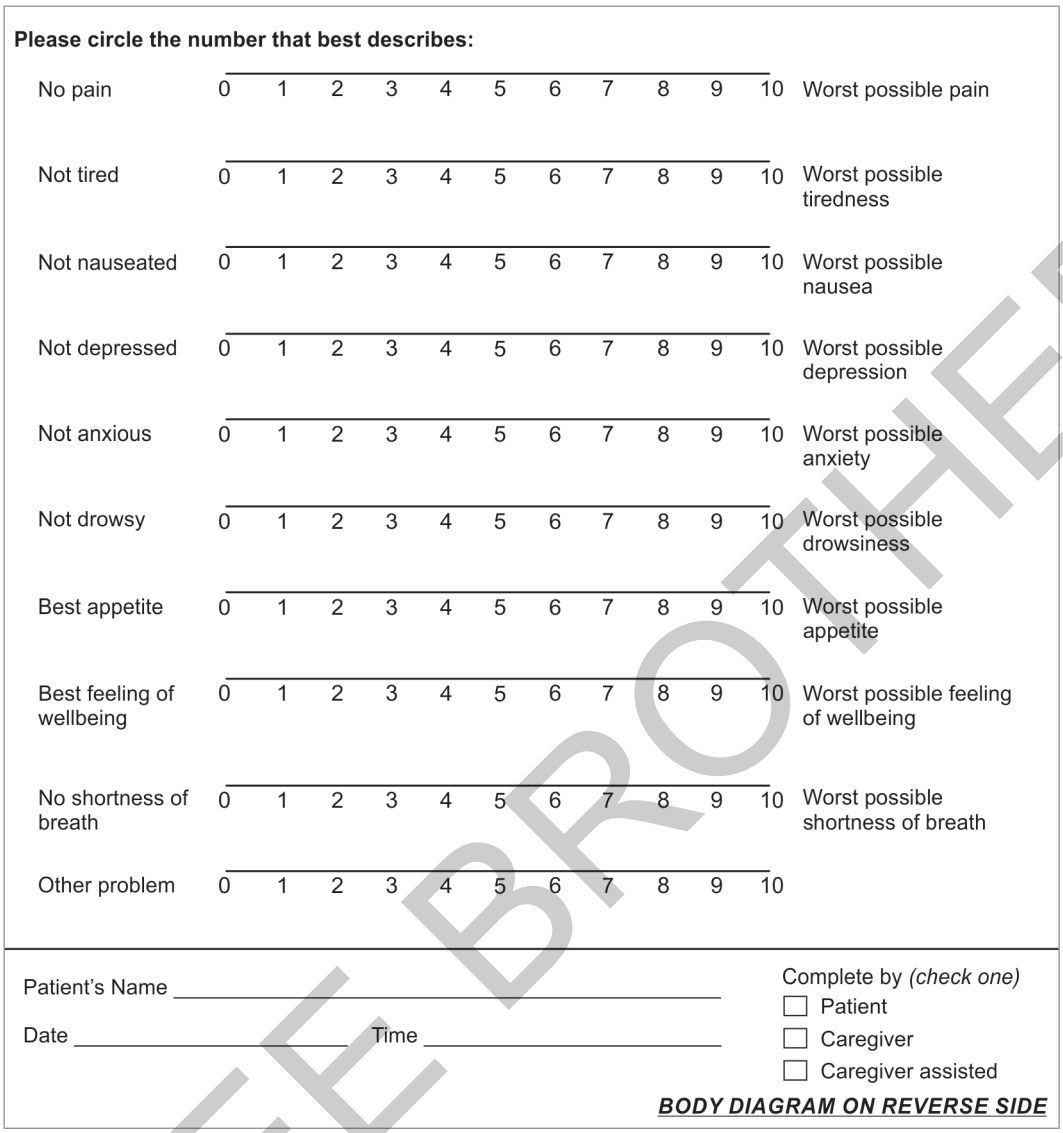


Fig. 1: The Edmonton Symptom Assessment System (ESAS): Numerical Scale.

Adjustment disorder is a term used to denote a psychiatric condition arising as a result of a stressor, characterized by a clinically significant impairment, deemed to be in excess of a normal reaction to the stressor in question. However, the symptom profile is not sufficient to meet the criteria for the diagnosis of major syndromes such as depression or anxiety.

Irrespective of the diagnosis—a simple, comprehensive and holistic approach to mental health assessment is exploring the biological, psychological and social dimensions, also known as "biopsychosocial model".[12]

- *Biological,* e.g., disruptions in sleep, appetite, energy levels, attention and concentration; physical symptoms of anxiety (sympathetic overactivity), etc.
- *Psychological,* e.g., disturbance of mood, apprehensions and anxious thoughts, diminished motivation to carry out activities of daily living, drop in the level of confidence, thoughts of helplessness, hopelessness, etc.
- *Social,* e.g., seeming quiet, withdrawn, impaired social functioning.

Irrespective of the diagnosis, red flags requiring further assessment and referral to psychiatric department include:

- Very severe biological symptoms
- Excessive guilt, feelings of worthlessness, suicidal ideation/plans
  - Asking about suicidal ideation does not induce/increase suicidality, so it is very important to ask patients about this
- *Psychotic symptoms:* These patients have a disturbed sense of reality and impaired insight, i.e., hearing voices, harboring delusions, or suffering from incongruent elated mood.

JAYPEE BROTHERS

Tick the box beside the reply that is closest to how you have been feeling in the past week.
Do not take too long over you replies; your immediate is best

D	A		D	A	
		I feel tense or 'wound up':			**I feel as if I am slowed down:**
	3	Most of the time	3		Nearly all the time
	2	A lot of the time	2		Very often
	1	From time to time, occasionally	1		Sometimes
	0	Not at all	0		Not at all
		I still enjoy the things I used to enjoy:			**I get a sort of frightened feeling like 'butterflies' in the stomach:**
0		Definitely as much		0	Not at all
1		Not quite so much		1	Occasionally
2		Only a little		2	Quite often
3		Hardly at all		3	Very often
		I get a sort frightened feeling as if something awful is about to happen:			**I have lost interest in my appearance:**
	3	Very definitely and quite badly	3		Definitely
	2	Yes, but not too badly	2		I do not take as much care as I should
	1	A little, but it does not worry me	1		I may not take quite as much care
	0	Not at all	0		I take just as much care as ever
		I can laugh and see the funny side of things:			**I feel restless as I have to be on the move:**
0		As much as I always could		3	Very much indeed
1		Not quite so much now		2	Quite a lot
2		Definitely not so much now		1	Not very much
3		Not at all		0	Not at all
		Worrying thoughts go through my mind:			**I look forward with enjoyment to things:**
	3	A great deal of the time	0		As much as I ever did
	2	A lot of the time	1		Rather less than I used to
	1	From time to time, but not too often	2		Definitely less than I used to
	0	Only occasionally	3		Hardly at all
		I feel cheerful:			**I get sudden feelings of panic:**
3		Not at all		3	Very often indeed
2		Not often		2	Quite often
1		Sometimes		1	Not very often
0		Most of the time		0	Not at all
		I can sit at ease and feel relaxed:			**I can enjoy a good book or radio or TV program:**
	0	Definitely	0		Often
	1	Usually	1		Sometimes
	2	Not often	2		Not often
	3	Not at all	3		Very seldom

Please check you have answered all the questions

Scoring:

Total score: Depresion (D) _____ **Anxiety (A) _____**

0–7 = Normal
8–10 = Borderline abnormal (borderline case)
11–21 = Abnormal (case)

Fig. 2: Hospital Anxiety and Depression Scale (HADS).

A psychiatrist plans the treatment of anxiety, depression and adjustment disorders along the biopsychosocial dimensions.

- *Biological:* Treatment of cancer; treatment of contributory physical causes of depression such as underactive thyroid, B_{12}/folate deficiencies; treatment with antidepressants, benzodiazepines (short-term), hypnotics (short-term); ECT, and so on.
- *Psychological:* Counseling, cognitive behavioral therapy (CBT), mindfulness, etc., preferred in mild

JAYPEE BROTHERS

Box 1: The ICD-10 diagnostic criteria of depression.

Major symptoms: At least one of these has to have been present for a diagnosis of depression
- Pervasive low mood
- Loss of interests and enjoyment
- Increased fatigability and diminished activity

Minor symptoms:
- Reduced concentration and attention
- Reduced self-esteem and self-confidence
- Ideas of guilt and unworthiness
- Bleak and pessimistic views of the future
- Ideas or acts of self-harm or suicide
- Disturbed sleep
- Diminished appetite

A combination of major and minor symptoms has to have been present on most days, most of the time for at least *2 weeks*

Mild depression: Four symptoms

Moderate depression: Five to six symptoms

Severe depression: Seven or more symptoms, further qualified as with or without psychotic symptoms

and moderate cases, depending on the availability of trained therapist.

- *Social:* Improving support by involving family and friends, referral to support groups such as Cancer Sahyog, which also offers financial support to patients in need.

Caregivers are also significantly affected by head and neck cancer—they may experience high levels of anxiety, worries of recurrence and may be affected by the patient's sense of well-being (and their own sense of well-being may reciprocally affect the patient too).[13] Hence, it is vital that caregivers are supported throughout the process of treatment too.

TOBACCO AND ALCOHOL CESSATION

Over three-quarters of head and neck cancers can be attributable to the combination of tobacco and alcohol use.[14] This staggering contribution signifies that cessation efforts among patients with head and neck cancer have numerous paybacks:

- The broad range of general improvements in physical health seen in all other individuals giving up tobacco and alcohol use
- The specific benefits in patients with cancer include:
  - A potential reduction in disease recurrence and incidence of new primaries
  - Improved response to cancer treatments
  - Improved quality of life[15]

Tobacco Cessation

When overall mortality among newly diagnosed head and neck cancer patients is compared: continuing smokers > quitters and former smokers > never smokers. India has a higher burden of oral cancers associated with the use of smokeless tobacco, which is available in myriad forms.[16] Hence, tobacco cessation interventions should be integrated into standard cancer treatment plans.[17]

The Cochrane Tobacco Addiction Group publishes evidence and guidelines on managing smoking cessation. Brief advice against smoking is defined as "verbal instructions to stop smoking with or without added information about the harmful effects of smoking." It is one of the most economical interventions in medicine and it can be carried out as a part of routine care by any health professional in 1–2 minutes.

Suggested phrasing for giving brief advice to smokers from "ABC of smoking cessation" by Tim Coleman:[18]
- The best thing you can do for your health is to stop smoking and I would advise you to stop as soon as possible.
- Tobacco is very addictive, so it can be very difficult to give up, and many people have to try several times before they succeed. Your chances of succeeding are much greater if you make use of counseling support, which I can arrange for you, and either nicotine replacement therapy or the antismoking drug bupropion, which I can prescribe for you.
- How do you feel about your smoking?
- How do you feel about tackling your smoking now?

Smokers who are highly motivated to quit may be supported by trained counselors who deliver intensive behavioral support to individuals or to groups. These counselors may focus on past smoking history, identify triggers for smoking behavior, set target quit dates, review progress periodically, etc.

The most effective methods to help smokers quit often combine drug treatment and specialist support. The combined treatment effects multiply rather than add up! Medications such as varenicline, bupropion, nortriptyline and clonidine have all been found to have varying levels of effectiveness in the treatment of tobacco dependence, but their use may be limited by side effects.

Nicotine replacement therapy, as the name suggests, attempts to eliminate withdrawal symptoms **(Fig. 3)**. It is available in many forms and all forms are effective. Prescribing practices depend on the availability of these forms as well as the individual patient characteristics/preferences.

- The use of inhalers very closely resembles the use of cigarettes, with respect to the act of smoking
- The use of oral chewing gums, again, resembles the use of smokeless forms of tobacco
- Patches ensure a constant level of nicotine in the bloodstream
- Nasal sprays can satisfy cravings/urges as they supply higher doses of nicotine rapidly[19]

JAYPEE BROTHERS

Alcohol Cessation

Individuals may consume alcohol socially without developing dependence (a less common occurrence with tobacco use), hence it is important to avoid assumptions and inappropriate stereotypes. The issue of safe drinking limits is a contentious one, with different organizations issuing different standards. Tools such as CAGE and AUDIT may be used to screen all patients for harmful use of alcohol and dependence is defined by the ICD-10 diagnostic criteria. Useful markers that indicate heavy drinking include altered liver function tests, and more severe physical complications such as delirium tremens, alcohol withdrawal seizures, and alcoholic liver cirrhosis.

Prochaska and DiClemente proposed a model of stages of change[20] **(Fig. 4)** to understand the process of change for problematic behaviors. Motivational interviewing is an evidence-based intervention with the aim of enhancing motivation, guiding the patient through the stages of change.[21] Most clinicians can

Fig. 3: Fagerström test for nicotine dependence.

1. How soon after you wake up do you smoke your first cigarette?
   - Within 5 minutes (3 points)
   - 5 to 30 minutes (2 points)
   - 31 to 60 minutes (1 point)
   - After 60 minutes (0 point)
2. Do you find it difficult not to smoke in places where you should not, such as in church or school, in a movie, at the library, on a bus, in court or in a hospital?
   - Yes (1 point)
   - No (0 point)
3. Which cigarette would you most hate to give up; which cigarette do you treasure the most?
   - The first one in the morning (1 point)
   - Any other one (0 point)
4. How many cigarettes do you smoke each day?
   - 10 or fewer (0 point)
   - 11 to 20 (1 point)
   - 21 to 30 (2 points)
   - 31 or more (3 points)
5. Do you smoke more during the first few hours after waking up than during the rest of the day?
   - Yes (1 point)
   - No (0 point)
6. Do you still smoke if you are so sick that you are in bed most of the day, or if you have a cold or the flu and have trouble breathing?
   - Yes (1 point)
   - No (0 point)

Scoring: 7 to 10 points = highly dependent; 4 to 6 points = moderately dependent; less than 4 points = minimally dependent.

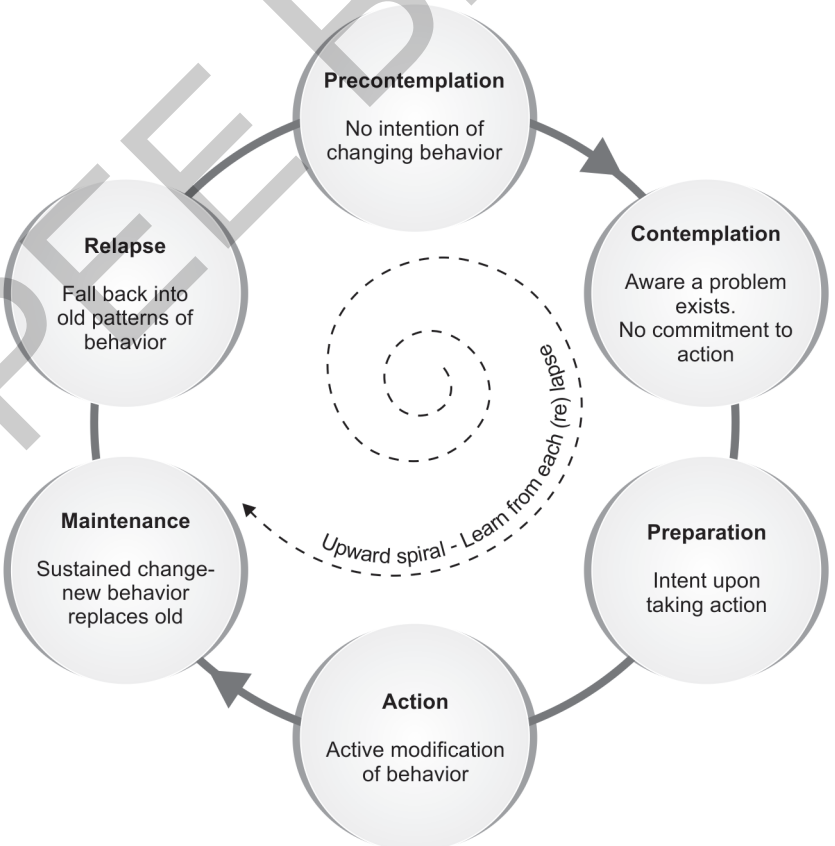


Fig. 4: The stages of change model.

JAYPEE BROTHERS

Box 2: FRAMES model.

- *Feedback:* Regarding personal impairment following assessment of substance use problems. The diagnosis of cancer may offer the opportunity of a "teachable moment" to encourage behavior change
- *Responsibility:* For the patient and for change is placed on the patient, respecting their autonomy
- *Advice:* About the importance of changing patterns of substance use is presented in a nonjudgmental manner, specifically the adverse consequences of continued substance use
- *Menu:* Menu of self-directed change options is offered to the patient, allowing them to choose the approach that suits them best
- *Empathy:* Showing warmth, respect and understanding is more effective than a confrontational or coercive style
- *Self-efficacy:* Instilling a sense of optimism in the patient, that the goals are achievable

deliver this effective brief intervention, comprising the following elements popularly known by the acronym *FRAMES* **(Box 2)**.

Patients may be referred to mental health professionals to receive more specialized treatments that fall under the umbrella of cognitive-behavioral interventions (such as assertiveness skills training, drink refusal skills training, problem-solving skills training, relaxation training).

The organization of Alcoholics Anonymous (AA) deserves a special mention. AA meetings are led by nonprofessionals and free of charge. AA works by strengthening the social support systems and it can very effective in a subset of patients.

The pharmacological treatment of alcohol dependence includes treatments for alcohol withdrawal as well as relapse prevention. Alcohol withdrawal is treated with thiamine and benzodiazepines. Medications used in relapse prevention are acamprosate, naltrexone, disulfiram, topiramate and baclofen among others.

IMPROVING COMMUNICATION

Try to think of the last time you witnessed excellent, satisfying communication between a doctor and a patient with cancer. Now try to remember the doctor and patient characteristics that determined the nature of that interaction.

Good communication with patients requires doctors to possess/demonstrate

- The right knowledge
- Anticipation of the information needs of patients
- A confident, open, respectful attitude
- An ease with which they switch between different types of communication such as providing verbal explanations, drawing diagrams, handing out leaflets, providing internet links.

Patient factors influencing communication include:

- Age
- Gender
- Level of education
- Socioeconomic level
- Ethnicity[22]

If a doctor could anticipate the information needs of the patient they were about to review, this could make their interaction more productive. A study conducted in the USA aimed at patients just diagnosed with head and neck cancer revealed:

- Most patients wanted further information on treatment options, advice on how to stay healthy after treatment, and how to manage sequelae. Understandably, most of them experienced this need for information at the time of diagnosis, or during early stages of treatment.
- Women sought more information about coping with stress and anxiety than male patients.
- Younger patients were more interested in aspects of functioning like sexuality after treatment than older patients[23]

Breaking Bad News

Many doctors feel uncomfortable when they have to discuss unfavorable prognostic information with their patients, and it does not help that this is a commonly encountered scenario in the field of cancer.

Try to think of the behavior you would expect from your doctor if you were in such this unfortunate situation, and it does not take long to realize the bottom-line: you would appreciate the truth delivered from a doctor who appears to genuinely care about you.

While it is challenging to plan these discussions beforehand, it is useful to have a framework in mind. The SPIKES protocol is an elegant, practical strategy to handle these situations:[24]

- *S: Setting up* the interview, ice-breaking comments, introductions
- *P:* Assessing the patient's *Perception*: how much do they know already?
- *I:* Obtaining the patient's *Invitation*
  - "I am afraid it looks more serious than we had hoped. If it is alright with you, I would like to talk you through it."
  - Some patients may not express a desire for full information about their diagnosis, prognosis and this is a valid psychological coping mechanism. Information must not be "dumped" onto a patient if they do not feel ready to receive it.
- *K:* Giving *Knowledge* and information to the patient
  - Try to use simple, jargon-free language

JAYPEE BROTHERS

- *E:* Addressing the patient's *Emotions* with *Empathic* responses
  - This comprises verbal and nonverbal responses
  - Some patients may need time for the news to sink in, long pauses may be necessary
- *S: Strategy* and *Summary*
  - Encourage questions from patients and try to answer them honestly
  - Clarify understanding
  - Work on a collaborative plan

IMPROVING COMPLIANCE TO TREATMENT

Treatment compliance can be an issue among patients with head and neck cancer. Sharma et al. evaluated this among 47 elderly head and neck cancer patients and found that over one-third were noncompliant.[25] Obviously, treatment outcomes and survival are influenced by compliance so making efforts to improve the same are important.

Treatment noncompliance may be a result of the following:

- *Pragmatic reasons:* Expensive treatment regimens, intolerable side effects, etc.
- *Lack of awareness:* Regarding the purpose of treatment, the impact of treatment, etc.
- *Social reasons:* Poor literacy, religious beliefs, lack of social support, stigma
- *Psychological reasons:*
  - Presence of psychological problems, particularly depression may render the patient "hopeless" about the treatment outcome, they may miss appointments
  - Psychological disturbances can be associated with cognitive impairment (problems with attention, concentration) that can affect the patient's understanding of cancer and its treatment.

Strategies to improve patient compliance include:

- Ensure the patient is well informed about the benefits of treatment, address all their concerns and expectations.
- Regularly review compliance, anticipate poor compliance in patients with the indicators listed earlier, and watch out for clues such as lack of response to treatment, missed appointments, etc.
- Simplify treatment regimens and schedule regular follow-ups to review their progress.
- Adopt a multidisciplinary approach—the involvement of nurses, pharmacists, etc., in addition to physicians have been found to improve compliance.

Obtain help from family members and friends where appropriate.[26]

COUNSELING IN END-OF-LIFE CARE/PALLIATION

Dealing with patients with cancer is already a sensitive affair, and for some of them, unfortunate bleak prognoses are inevitable. As doctors, we must approach these situations delicately and sensibly.

It is good practice to assess the level of suffering of patients with cancer whenever there is a change in prognosis. While suffering is often considered in terms of physical symptoms (such as pain—which may warrant palliation treatment), it may also have emotional, social and spiritual significance, particularly at the end of life. Acknowledging these problems and providing adequate support can improve the quality of life of these patients.

While some patients may accept/resign to the prospects of facing death; others may experience denial, worry about pain and other physical symptoms, struggle with the thought of losing control, develop clinical depression, and so on. Hence, end-of-life conversations are difficult to prepare for. A rigid formulaic approach to these conversations may be unsuitable and may make the doctor come across as insensitive. Once again, being an attentive, empathic listener is a good place to start. Remember the features of good communication and try to use them—try to be patient and let the genuine concern you have for your patient show.

A patient-led approach may be practical. Start with—what is worrying this patient the most? What meaning does this prognosis have for them? Discussions on spiritual meaning, existence and purpose may dominate the conversation—the clinician may have to acknowledge their own inexperience in these areas.

There may be dedicated specialists providing emotional support in palliative care in your hospital. It may be necessary to, or sometimes patients may themselves request a referral to psychology department. Therapists may try a variety of interventions based on the recognized needs, e.g., CBT approaches, therapist-guided life review, meaning-centered group psychotherapy, etc.[27]

Supporting ones close to the patient with cancer is equally important, as is addressing their concerns and fears, which may be linked with the patient's own concerns and fears. These individuals are likely to require further support when they attain bereaved status, when they could be referred to cancer bereavement groups in the community.

REFERENCES

1. Holmes TH, Rahe RH. The Social Readjustment Rating Scale. J Psychosom Res. 1967;11(2):213-8.

JAYPEE BROTHERS

2. Howren MB, Christensen AJ, Karnell LH, Funk GF. Psychological factors associated with head and neck cancer treatment and survivorship: evidence and opportunities for behavioral medicine. J Consult Clin Psychol. 2013;81(2): 299-317.
3. Sollner W, DeVries A, Steixner E, Lukas P, Sprinzl G, Rumpold G, et al. How successful are oncologists in identifying patient distress, perceived social support, and need for psychosocial counselling? Br J Cancer. 2001;84(2):179-85.
4. Bruera E, Kuehn N, Miller MJ, Selmser P, Macmillan K. The Edmonton Symptom Assessment System (ESAS): a simple method for the assessment of palliative care patients. J Palliat Care. 1991;7(2):6-9.
5. Zigmond AS, Snaith RP. The hospital anxiety and depression scale. Acta Psychiatr Scand. 1983;67(6):361-70.
6. Watanabe S, Nekolaichuk C, Beaumont C, Mawani A. The Edmonton Symptom Assessment System—what do patients think? Support Care Cancer. 2009;17(6):675-83.
7. Mitchell AJ, Chan M, Bhatti H, Halton M, Grassi L, Johansen C, et al. Prevalence of depression, anxiety, and adjustment disorder in oncological, haematological, and palliative-care settings: a meta-analysis of 94 interview-based studies. Lancet Oncol. 2011;12(2):160-74.
8. Massie MJ. Prevalence of depression in patients with cancer. J Natl Cancer Inst Monogr. 2004;32:57-71.
9. Pinquart M, Duberstein PR. Depression and cancer mortality: a meta-analysis. Psychol Med. 2010;40(11):1797-810.
10. Rutledge T, Reis VA, Linke SE, Greenberg BH, Mills PJ. Depression in heart failure a meta-analytic review of prevalence, intervention effects, and associations with clinical outcomes. J Am Coll Cardiol. 2006;48:1527-37.
11. Robinson RG, Jorge RE. Post-Stroke depression: a review. Am J Psychiatry. 2016;173(3):221-31.
12. Engel GL. The need for a new medical model: a challenge for biomedicine. Science. 1977;196:129-36.
13. Longacre ML, Ridge JA, Burtness BA, Galloway TJ, Fang CY. Psychological functioning of caregivers for head and neck cancer patients. Oral Oncol. 2012;48(1):18-25.
14. Curado MP, Boyle P. Epidemiology of head and neck squamous cell carcinoma not related to tobacco or alcohol. Curr Opin Oncol. 2013;25(3):229-34.
15. McCarter K, Martinez U, Britton B, Baker A, Bonevski B, Carter G, et al. Smoking cessation care among patients with head and neck cancer: a systematic review. BMJ Open. 2016; 6(9):e012296.
16. McKay AJ, Patel RK, Majeed A. Strategies for tobacco control in India: a systematic review. PLoS One. 2015;10(4):e0122610.
17. Choi SH, Terrell JE, Bradford CR, Ghanem T, Spector ME, Wolf GT, et al. Does quitting smoking make a difference among newly diagnosed head and neck cancer patients? Nicotine Tob Res. 2016;18(12):2216-24.
18. Coleman T. ABC of smoking cessation. Use of simple advice and behavioural support. BMJ. 2004;328(7436):397-9.
19. Lancaster T, Stead L, Silagy C, Sowden A (for the Cochrane Tobacco Review Group). Effectiveness of interventions to help people stop smoking: findings from the Cochrane Library. BMJ. 2000;321(7257):355-8.
20. Alidosti M, Tavassoli E, Baneshi M, Gharlipour Z. The determination of physical activity among girl adolescents based on Trans-Theoretical Model (TTM). Int J Pediatr. 2017;5(7):5315-26.
21. Miller WR, Rose GS. Toward a theory of motivational interviewing. Am Psychol. 2009;64(6):527-37.
22. Chaturvedi SK, Strohschein FJ, Saraf G, Loiselle CG. Communication in cancer care: psycho-social, interactional, and cultural issues. A general overview and the example of India. Front Psychol. 2014;5:1332.
23. Fang CY, Longacre ML, Manne SL, Ridge JA, Lango MN, Burtness BA. Informational needs of head and neck cancer patients. Health Technol (Berl). 2012;2(1):57-62.
24. Baile WF, Buckman R, Lenzi R, Glober G, Beale EA, Kudelka AP. SPIKES—a six-step protocol for delivering bad news: application to the patient with cancer. The oncologist. 2000;5(4): 302-11.
25. Sharma A, Madan R, Kumar R, Sagar P, Kamal VK, Thakar A, et al. Compliance to therapy—elderly head and neck carcinoma patients. Can Geriatr J. 2014;17(3):83-7.
26. Boyle D, Bubalo J. Enhancing patient adherence to improve outcomes with oral chemotherapy. US Pharm. 2007;32(10) (Oncology Suppl):1-8.
27. Vachon MLS. Counselling and psychotherapy in palliative/hospice care: a review. Palliat Med. 1988;2:36-50.

JAYPEE BROTHERS

r detailed information on oncology books, visit our website www.jaypeebrothers.com, for detailed information on oncology books, visit o

Comprehensive Management of HEAD and NECK CANCER

Head and neck cancer is an excellent example of a specialty that requires a multidisciplinary approach at every level—prior to diagnosis, through treatment and during rehabilitation. In addition to having a collaborative mindset, this also means that practitioners need to have a working knowledge of various specialties in relation to head and neck cancer. This textbook attempts to summarize relevant concepts and information while covering topics in enough detail to cater to higher trainees and practitioners. Written by practitioners and academicians, this volume comprises 46 detailed chapters, each written as a systematic review of landmark and contemporary literature with multiple figures and images to improve comprehension.

Traditional topics like management of the neck and carcinoma of unknown primary have been revisited with various guidelines and algorithmic approaches while newer concepts like personalized medicine and robotic surgery have been covered in great detail. Reconstructive surgery following ablation of head and neck cancer is covered in extensive detail with five chapters, including facial nerve reanimation. Chapters covering rehabilitation of head and neck cancer patients written by subject experts have been included along with detailed chapters covering nutrition, anesthesia, pain management, psycho-oncology, dental oncology and nuclear medicine. It covers management and treatment principles from a basic level to state-of-the-art, while offering available evidence with consensus guidelines wherever possible.

Narayana Subramaniam MS MRCSEd MCh FICRS is a Consultant and Assistant Fellowship Director, Department of Head and Neck Oncology and Reconstructive Surgery, Mazumdar Shaw Medical Center, Narayana Health City, Bengaluru, Karnataka, India. After completing his training in general surgery, he completed his MCh in Head and Neck Oncology and Reconstructive Surgery at Amrita Institute of Medical Sciences, Kochi, Kerala. He also completed an advanced fellowship at the Sydney Head and Neck Cancer Institute in Australia and a TransOral Robotic Surgery Visiting Scholarship from the University of Pennsylvania in Philadelphia, USA. He performs ablative surgery of the head and neck and anterior skull base with expertise in a salvage/re-operative setting. He also performs microvascular reconstruction, with a special interest in facial reanimation, prosthodontic rehabilitation and secondary reconstruction. Prior to this he has authored over seventy peer-reviewed articles and book chapters and given over sixty scientific presentations. He is an investigator on ongoing clinical trials worth over ten crore rupees ($1.25M).

Sivakumar Vidhyadharan MS DNB MCh FICRS FEBORL-HNS is the Director, The Head and Neck Centre & Hospital (THANC Hospital), Chennai, Tamil Nadu, India and Consultant, Department of Head and Neck Surgical Oncology, Apollo Proton Cancer Centre, Chennai. He is an Adjunct Faculty, Department of Head and Neck Surgical Oncology, Amrita Institute of Medical Sciences, Kochi, Kerala. His interests in minimally invasive surgery has led to completion of two clinical fellowships in Robotic Head and Neck Surgery and Advanced Otolaryngology at the Royal Adelaide Hospital, Australia. He also trained as Visiting Scholar in Reconstructive Microsurgery at the Department of Plastic Surgery, Chang Gung Memorial Hospital, Linkou, Taiwan. He is skilled in head and neck extirpative surgery including thyroid and skull base, with expertise in robotic and endoscopic surgeries. He has special interest in rehabilitation of patients with swallowing disorders and functional head and neck reconstruction. As a surgeon scientist, he has published more than thirty peer-reviewed articles and book chapters and has presented in over forty national and international meetings. He is currently an Executive Body Member of the Association of Phono Surgeons of India.

Samskruthi P Murthy MS MCh FHNO is currently working as Assistant Professor, Department of Head and Neck Oncology, Kidwai Memorial Institute of Oncology, Bengaluru, Karnataka, India and Director, Can-C Superspecialty Centre, Bengaluru. She has completed her Master of Chirurgiae (MCh) in Head and Neck Oncology and Reconstructive Surgery from Amrita Institute of Medical Sciences, Kochi, Kerala. She has also completed her Fellowship in Head and Neck Oncology from Kidwai Memorial Institute of Oncology, Bengaluru and Visiting Scholarship in Head and Neck Oncology at University of Pittsburgh Medical Center, USA. She performs complex surgeries including resection of advanced head and neck tumors, with expertise in reconstruction of complex defects with regional and free flaps. She has won various awards including Best Publication by Indian Author and Best Research Award at national and international conferences. She has authored numerous publications in reputed journals and has authored various book chapters.

Available at all medical bookstores
or buy online at www.jaypeebrothers.com

JAYPEE BROTHERS
Medical Publishers (P) Ltd.
www.jaypeebrothers.com

Join us on facebook.com/JaypeeMedicalPublishers

Shelving Recommendation
ONCOLOGY

ISBN 978-81-947090-4-6