Medical Internship Survival Guide

Introduction

Rationale

The internship period can be tough and challenging. The journey truly begins with the realization that you are ultimately responsible for your own education. Alongside this daunting task, interns frequently encounter complex and sometimes uncomfortable interpersonal situations involving attendings, residents, peers, and patients, which can be difficult to navigate. Based on personal experience, an approach rooted in curiosity, responsibility, and compassion can be beneficial in managing these challenges. Although interns may not enjoy much free time, their legal immunity and the reduced emphasis on exams and scores allow for a more flexible learning experience. This gives you the opportunity to explore what truly seems useful and learn in a manner that aligns with your preferred style. By exercising your autonomy and independence to select from a variety of learning resources, you can enhance your emotional engagement in the learning process, making the entire experience more rewarding, and less tedious.

What Is This Guide About?

This guide aims to introduce alternative resources that the author found useful during their internship, along with instructions on how to access them. The goal is to provide you with a head start on your independent learning journey. Additionally, some general tips regarding personal well-being and interpersonal interactions will be shared to help you maintain your sanity during this challenging and stressful period.

Who Is This Guide For?

While this guide is primarily written for Iranian junior interns looking to develop their clinical skills and knowledge, other clinicians—including junior medical students, residents, and general practitioners—may also find the discussed materials of interest.

Note: This guide is not suitable for preparing for residency exams. If you are planning to take the exam soon, this guide may not be for you.

Disclaimer

This guide reflects the author's limited perspective, interests, educational gaps, and personal experiences. A resource or tip that has proven valuable for one person may not be effective for another. Therefore, consider everything stated here as mere suggestions and approach it with a critical mindset.

Note: You are not expected to read **any** of the following resources cover-to-cover during your internship. You are encouraged to read sections that you find clinically useful or simply interesting.

Request

This guide emerged from a collective spirit that emphasizes open access to and free circulation of knowledge. It also seeks to show gratitude to the senior interns, residents, and colleagues who supported the author during their training. Thus, **you are strongly encouraged to clone this guide**, **share it**, **modify it as you wish**, **and publish it under your own name**.

Resources

How to Access These Resources?

- <u>Library Genesis</u>: A collaboratively run shadow library project that provides access to articles and books. It has an excellent archive, but download speeds are relatively slow. If it's unavailable, check their Wikipedia page for updated working domains.
- Anna's Archive: The largest archive among these options, but it also has slow download speeds.
- Z-library: A more limited archive with excellent download speeds. It allows you to create your own Telegram bot. If it's unavailable, check their Wikipedia page for updated working domains.
- Ebookrally: Allows you to purchase selected ebooks that you can't find for free.
- <u>Copify</u>: A similar service to Ebookrally with a more limited archive, but it offers better pricing.
- <u>iMD</u>: Provides access to numerous medical textbooks, apps, online services, courses,
 USMLE tests, etc. An excellent all-in-one resource that comes with reasonable pricing,
 but also a terrible UI.
- **Google It**: Search for resources in both Farsi and English. There are numerous websites that provide learning materials for free or at a very low cost.

• Others: Here's a comprehensive guide on piracy resources.

Note: Do not gatekeep. If you purchase a resource, always consider uploading it to Libgen. Give back to the community.

General skills

Evidence-based Medicine

You are neither expected nor able to memorize every single detail required to diagnose and manage every single pathology, but you are required to practice in accordance with the latest high-quality evidence. These two apps/websites allow you to find reliable answers to your clinical questions quickly. Get comfortable with them and learn to use them effectively and quickly.

- <u>UpToDate</u>: It's a **must have.** It's a subscription-based service that provides you with all the relevant information, management algorithms, drug interaction checking service, etc. Basically, everything you need to navigate through a clinical situation. Many websites allow you to purchase a subscription; simply Google it in Farsi. It's also available on iMD. **Note:** Because of the insecure internet access condition in Iran, you are strongly advised to also subscribe to UpToDate's offline service.
- Medscape: The free alternative to UpToDate. The entries are significantly more concise and limited.
- MDCalc: An extremely handy tool for calculating clinical scores based on different criteria, and various other clinically relevant measures.

Physical Examination

• <u>Stanford Medicine 25</u>: A quite comprehensive video archive on physical examination. An excellent resource. Also available on YouTube.

Medical Procedures

- Roberts and Hedges' Clinical Procedures in Emergency Medicine and Acute Care:
 A comprehensive textbook, covering almost every procedure you might encounter during your internship and beyond. It also includes many <u>videos demonstrating key</u> procedures and techniques.
- Suture like a Surgeon: A Doctor's Guide to Surgical Knots and Suturing
 Techniques...: A quick read, covering the theoretical foundations pretty well, but terrible when it comes to actually teaching techniques.
- Atlas of Suturing Techniques: Approaches to Surgical Wound, Laceration, and Cosmetic Repair: The go-to reference when you want to do anything more complex

than a simple interrupted suture. It also comes with various perfect illusterations and some accompanying videos.

Clinical Reasoning and Personal Competencies

- <u>Case Records of the Massachusetts General Hospital</u>: A massive collection of case
 presentations that walk you through diagnosis, workup, and management, published by
 the prestigious New England Journal of Medicine. Free for Iranian users.
- <u>School of Medicine</u>: A website that focuses on both the hard and soft skillsets required for practicing medicine. Only in Farsi.

Internal Medicine & Infectious Disease

- Cecil Essentials of Medicine: Easier to read and more concise than Harrison's, but enough to provide you with a solid foundation in medicine, especially when combined with UpToDate.
- Harvard's Intensive Review of Internal Medicine: A collection of video lectures reviewing the entire internal medicine, focusing on practical matters and the latest evidence and guidelines. A fantastic experience.
- Blood Film Morphology A Practical Guide: A consice and practical course.
- <u>Stanford's Antimicrobial Stewardship Course</u>: A Course focused on rational prescription of antibiotics and combating antibiotic resistance.

Pediatrics

Rudolph's Pediatrics: A general textbook of pediatrics. More detailed than Nelson
essentials, but not as dense as Nelson textbook. Amazing chapters on epilepsy and
pediatric neurology. Very easy to read, but might be a little outdated. A personal
favourite.

- The Harriet Lane Handbook: The Johns Hopkins Hospital: A highly regarded inpatient pediatrics handbook, excellent quick reference.
- Pediatric Decision-Making Strategies: It has an algorithm for every common chief complaint in pediatrics. A little outdated.
- Fleisher & Ludwig's 5-Minute Pediatric Emergency Medicine Consult: A very practical and comprehensive desk reference, for a quick look up when you have no clue about what to do with a patient in the ED.
- <u>PedsCases</u>: A clinical podcast by the university of Alberta. A good option for times
 when you're not in the mood to read.

Surgery

- Sabiston Textbook of Surgery or Mulholland & Greenfield's Surgery: Both are
 comprehensive general surgery textbooks. Some may find Sabiston to be more
 practically oriented with a lot of diagnostic and management algorithms, but on the other
 hand, Greenfield's chapters are better organized and easier to read, with a heavier
 focus on recent trends and developments. Ultimately, the choice between these two
 textbooks is a matter of personal taste.
- The American College of Surgeons' Comprehensive General Surgery Review: A
 collection of video lectures reviewing the entire general surgery, practical and up to
 date.
- Western Trauma Association: Check for the latest algorithms.

Note: The author advises **against** reading **Lawrence's Essentials of General Surgery** and **Schwartz's Principles of Surgery**. Both are badly organized and relatively outdated in comparison to the aforementioned textbooks.

OB/GYN

- Hacker & Moore's Essentials of Obstetrics and Gynecology: Very well organized and easy to read. A little outdated.
- Beckmann and Ling's Obstetrics and Gynecology: The official reference. Also, a good textbook.

Cardiology

- Fuster and Hurst's The Heart: A comprehensive cardiology textbook with excellent chapters on physical examination and differential diagnosis. A personal favourite, but a little dense.
- Textbook of Emergency Cardiology: A practical and relatively conscice textbook. Very readable and well-organized.
- Goldberger's Clinical Electrocardiography: A Simplified Approach: Amazing ECG textbook that focuses on understanding, rather than memorization.
- <u>Harvard's ECG Wave-Maven</u>: A collection of annotated ECGs, excellent for selfexamination and hands-on practice.
- <u>Life In The Fast Lane</u>: A Lot of ECG cases suitable for self-examination and hands-on practice, and many other critical medicine resources.

Dermatology

• **Dermatology For The USMLE**: Very concise, practical, well illustrated, and easy to read. A personal favourite.

Emergency Medicine & Medical Toxicology

- Harwood-Nuss' Clinical Practice of Emergency Medicine: Very clinically oriented textbook. Also contains a section on high-risk chief complaints. More Concise and practical than Tintinalli's and Rosen's.
- Rosen & Barkin's 5 Minute Emergency Medicine Consult: A very practical and comprehensive desk reference, for a quick look up during shifts.
- Goldfrank's Toxicologic Emergencies: The bible of clinical toxicology.
- Goldfrank's Clinical Manual of Toxicologic Emergencies: An excellent handbook to look up during shifts. Covers every toxicologic emergency, especially when combined with UpToDate.

Neurology & Neurosurgery

General Neurology & Neurosurgery

- Merritt's Neurology: A comprehensive general neurology textbook. Section III is a must-read. Unbelievably Readable.
- Mayo Clinic Neurology Board Review: Very comprehensive, yet concise, with so many great tables. A personal favourite.
- Greenberg's Handbook of Neurosurgery: Trauma chapters are essential.
- **Continuum**: An educational neurology journal, reviewing the entire field of neurology every three years. Every single issue is a masterpiece. Up to date, very readable, and aesthetically pleasing. A little hard to pirate.
- Clinical Reasoning in Neurology: A Case-Based Approach: Also published by the AAN, it contains various case presentations and walks you through diagnostic reasoning, work-up, and management. Aimed mostly at residents and fellows. A personal favourite.
- <u>Virtual Resident Lecture Series</u>: A series of periodical lectures reviewing certain topics in neurology by the American Academy of Neurology. Highly recommended.
- <u>Neurophile</u>: A collection of highly visualized and aesthetically pleasing educational neurology videos, targeting a wider range of audience, from medical students to neurovascular fellows.

Localization

• Localization in Clinical Neurology: Gold standard localization text, but extremely

dense.

- **Neuro-Logic: A Primer on Localization**: A brief review of neuroanatomy and localization basics. A little basic, but a quick and easy read.
- <u>NeuroLogic</u>: An interactive tutorial designed to teach a systematic approach to localization, maintained by the University of Michigan.

Neurological Examination

 DeMyer's The Neurologic Examination: A Programmed Text: A comprehensive neurological examination textbook that comes with a lot of <u>videos</u>. The chapter on functional neurologic symptom disorder (conversion disorder) is essential.

Ophthalmology

- **Kanski's Clinical Ophthalmology**: A highly illustrated textbook. well organized and easy to read.
- <u>EyeWiki</u>: A Wikipedia-style ophthalmology encyclopedia, maintained by the American Academy of Ophthalmology. Up to date, readable, and practical.
- The Wills Eye Manual: An amazingly practical handbook, excellent for quick look-up during shifts.

Orthopedics

 McRae's Orthopaedic Trauma and Emergency Fracture Management: Concise and highly practical, both as a desk reference during shifts and primary study material. A little dense.

 OrthoBullets: Massive, collectively maintained orthopedics resource, bullet-style educational topics, video lectures, clinical cases, podcasts, flash cards, etc.

Otorhinolaryngology

- **Handbook of Otolaryngology**: The official reference. Also, a very good handbook, especially when combined with UpToDate.
- Parham's Emergency Otorhinolaryngology Cheet Sheet: A very practical cheat sheet curated by a fellow then-intern. Suitable for ED and office-based practice. In Farsi.

Psychiatry

General Psychiatry

- Kaplan & Sadock's Synopsis of Psychiatry: The gold standard textbook. Cover's everything you might need in clinical practice. Relatively Concise and practical. Chapters on ADHD, Autism Spectrum, Adult Neurocognitive, Opioid-Related, Schizophrenia Spectrum, Bipolar, Depressive, Anxiety, Obsessive-Compulsive, Trauma-Relate, and Sleep-Wake Disorders are essential. There are a few discrepancies between some tables and the DSM. Watch out for possible errors.
- Kaplan & Sadock's Pocket Handbook of Clinical Psychiatry: Briefer than synopsis.
 Good for review, and when you don't have enough time for reading the synopsis. The chapter on Psychiatric History Taking is essential.
- **DSM-5-TR**: The universal guide map for psychiatrists. It's a must-have.
- The American Psychiatric Publishing Textbook of Personality Disorders: Focusses
 on the Alternative DSM-5 model, which is more useful than the standard model. the
 first part is recommended reading.
- IACAPAP e-Textbook: Chapter H.3 and The LGBT Casebook: Part I: Cisheteronormative ideas are prevalent in society and are usually unconsciously learned during personal development, and not even high-profile clinicians are immune to it. Uncovering these unconscious biases and avoiding them is crucial for providing high-quality health care to people with marginalized sexual identities. Acting based on these biases can lead to severely unethical and damaging practices such as conversion therapy. Both are a little old but still extremely relevant.
- Suicide Prevention: Stahl's Handbooks: Essential reading for every medical practitioner.
- <u>Decoding Delusions</u>: A lecture by Douglas Turkington on how to understand and work with delusional patients, based on a book of the same name.
- The American Psychiatric Association Membership: Apply for a membership to benefit from many virtual courses and discounts.

Dynamic Psychiatry

- Long-term Psychodynamic Psychotherapy: A Basic Text: An introductory text. Very fun to read.
- <u>Psychodynamic Psychopharmacology</u>: David Mintz's lecture on the psychodynamic approach to psychopharmacotherapy and treatment resistance. Watch this to understand there's more to psychiatry than pushing SSRIs down everyone's throats.
- <u>Borderliner Notes</u>: A YouTube channel focused on borderline and narcissistic personality disorders, containing multiple short explanatory interviews with the greatest names in the field, and the patients themselves.

Neuropsychiatry

- <u>Delirium Lecture Presentation</u>: A brief overview of phenomeology, diagnosis and management. Final references are useful.
- The MoCA Test: Montreal Cognitive Assessment is a validated, highly sensitive tool for early detection of mild cognitive impairment. Performing this test requires taking a paid training course. E-mail the MoCA Team and explain your condition. They generously allow people from low-income countries access to their training materials.

Psychopharmacology

- Prescriber's Guide: Stahl's Essential Psychopharmacology: An excellent psychopharmacology desk reference. Comprehensive, detailed, yet very practical.
- Cafer's Psychopharmacology: Visualize to Memorize: Highly illustrated with a lot of comparison and summary tables, to help you with memorization.
- The Maudsley Deprescribing Guidelines: Deprescribing is an essential part of psychiatry that is almost nowhere taught. This guideline fills this important gap.

Sociopolitical and Humanistic Aspects

- Psychiatric Ethics: Chapters on Boundary violations and The Abuse of Psychiatry are recommended readings.
- Conversations in Critical Psychiatry: These conversations engage prominent commentators within and outside the profession who have made meaningful criticisms of the status quo. Also available on <u>substack</u>.
- <u>The Maudsley Debates</u>: A series of public debates mostly about sociopolitical, ethical, and legal issues in psychiatry.
- <u>Grief Lecture Presentation</u>: A brief review of grief and its pathological forms. Final references are useful.

Radiology

- <u>Radiopaedia</u>: A Wikipedia-style radiology resource, with numerous cases, and fantastic courses, podcasts, etc. All of their courses and search strategy/approach articles are highly recommended. Their <u>Emergency Radiology</u>, <u>Trauma Radiology</u>, and <u>Abdominal Emergency Radiology</u> courses are essential.
- Fundamentals of Body CT: An excellent textbook for a more in-depth discussion of CT imaging.
- Brant and Helms' Fundamentals of Diagnostic Radiology or Grainger & Allison's
 Diagnostic Radiology: Both are comprehensive radiology textbooks with a heavy
 theoretical leaning, useful for developing differential diagnoses. Some may find
 Grainger's less dense. Chapters on pulmonary infections are essential reading.

Note: Radiopaedia provides free access to learners from low-income countries. Although

due to unfortunate political and legal issues, Iran is not listed on their financial aid list, they will generously grant you an all-access pass if you email them and explain your condition.

Urology

UpToDate

Medicine in Low-resource Settings

- Tactical Medicine Essentials: Concise, Practical, and highly illustrated. Useful for warzones and battlefields.
- Borden Institute's Fundamentals of Military Medicine: Useful for warzones and battelfields. With a focus on tactical management.
- Borden Institute's Emergency War Surgery: Useful for warzones and battelfields.
 More clinically oriented and practical.
- Riot Medicine Collection: Excellent resource, useful during civil unrest situations.

• Auerbach's Wilderness Medicine: The gold standard textbook in the field.

Miscellaneous

Medical Humanities

Without trying to enter the shark-infested waters of the philosophy of medicine explicitly, the following books may expand your understanding of medicine as a social practice.

- Foucault, The Birth of the Clinic: An Archaeology of Medical Perception: Interprets the advent of modern medicine history, and the epistemic ruptures that brought it about.
- Foucault, The Birth of Biopolitics: Lectures at the Collège de France, 1978-1979:
 Expanding on the concept of biopolitics and medicine as a locus of normalizing power and control.
- Bratton, The Revenge of the Real: Politics for a Post-Pandemic World: A short polemical monograph antagonizing the mainstream interpretations of biopolitics as essentially negative, by endorsing a positive epidemiological view of society.
- Ladyman, Understanding Philosophy of Science: A solid understanding of the philosophy of science is essential for countering and making sense of the claims of the proponents of pseudoscientific alternative medicine practices.

Blogs & Telegram Channels

Amirmohammad Ghorbani's <u>personal blog</u> and <u>School of Medicine Telegram</u>

<u>channel</u>: Both belong to Amirmohammad, a passionate learner, a dedicated physician, and a medical education guru with a unique humanist perspective and questionable taste in poetry. Both in Farsi.

- <u>UpToDate's Common Approaches</u> and <u>Internal Medicine Approaches</u> Telegram channels: Sharing diagnostic and management approaches to common conditions, in algorithmic and podcast format. Both in Farsi.
- The <u>Internship Guide</u> Telegram channel: Fulfills the same task as this guide, but more comprehensive and in detail. In Farsi.
- <u>Deep Medicine</u>, <u>Grow</u>, and <u>Mim Mo'allagh</u> Telegram channels: Medical cases and slices of physicians' life. All run by passionate and competent practitioners. All in Farsi.
- A Psychiatrist's Notes Telegram channel: Sharing actual psychiatric mismanagement cases in a humorous language and close reading literary works through a psychological lens. In Farsi.

Life During Internship

Mental Health and Sleep

Internship is tough, and you are not Superman, or constantly on coke-I hope. You, like many of us, may fall prey to burnout, anxiety, mood disorders, and various psychiatric disorders. Always take adequate rest when you can. Prioritize your well-being. Immerse yourself as much as possible in things that keep you happy. Focus on what gives meaning to your life. Hold tight onto your hobbies. Socialize when you can. During this period, you're going to encounter some disturbing situations. Patients die. Mistakes are made. Conflicts arise. These are all part of the job. Take your time to process your feelings, talk about them, and move on. If you're too tired to do anything, it's alright, and there's no shame to it. If you're not feeling OK, don't be afraid to ask for help. Your psychiatry attendings are there for you in case you ever need professional help.

The internship period is short; try your best, but accept that you can't learn everything there is to medicine. No matter how hard you try, you will never be a perfect, infallible physician. Remind yourself that learning doesn't end with graduation. You have a lifetime of learning ahead of you. It takes a lot of responsibility and dedication to pull all your strength together to learn as much as you can, but always remember that People's meat, is physicians poison. An imperfect physician is surely better than a perfect but dead one.

Adequate sleep is crucial to mental well-being. Educate yourself about shift work sleep disorder and relevant conditions. Use those tips to optimize your sleep duration and quality.

Note: Never take a psychotropic medication on your own, no matter if you're a junior medical student or a seasoned psychiatrist; always consult another professional.

Interpersonal Relationships and Abuse

Studies show non-traumatic stressful events, such as Poor role modeling and mistreatment by superiors are associated with increased anxiety scores and are suggested to decrease personal well-being in medical students. Interestingly, the number of direct trauma exposures, such as stressful patient-student interactions, is not significantly associated with long-term personal distress. This suggests that while students may become accustomed to working in a medical environment, the attitudes and behaviors of those supervising them may be more important in their well-being. Stand in solidarity against abusing seniors. No one has the right to verbally or physically abuse you. At the same time, don't take these encounters personally. Always remember that every relationship is a mixture of transferential and real qualities. Also, never forget that being mistreated does not give you permission to mistreat others. Be kind and supportive toward the junior and fellow trainees.

Note: Here's a very brief <u>source-book</u> that we curated to defend a resident's case against abusing senior residents and attendings. You might find some of these citations useful for backing up your statements in similar cases.

Minorities and Marginalized Groups

Going through medical school as a minority feels like competing in a marathon while carrying an invisible boulder. You are seen and your struggle is valid, but remember that you're probably neither the first nor the last minority person who has been through this, and it is ultimately up to you to make something useful out of your struggle. Think of the unique perspective that being a minority has bestowed upon you, how it has enhanced your ability to empathize with different people. Our suffering ultimately becomes a toolbox with which we can help ourselves and others, but only if we allow it. Live your life. Be yourself. Be proud. But never forget that you also must protect yourself from other people. Not everyone is accepting of you, but you also don't need everyone's acceptance. Focus on the safe people who are closer to you. Those are the ones who truly matter.

Olympiads and Competitions

The clinical reasoning olympiad can be an effective tool to boost your motivation for learning. Study in groups and debate the problems. Try to have fun with it as much as you can. If your efforts lead to a medal, then kudos to you; if not, then there's nothing personal. You learned a lot, and had fun doing it; that's the only thing that truly matters.

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