NATIONAL CLINICAL GUIDELINES

THE DIAGNOSIS & MANAGEMENT OF GENERALISED ANXIETY DISORDER IN ADULTS

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المبادئ الإرشادية السريرية لدولة قطر
NATIONAL CLINICAL GUIDELINES FOR QATAR

وزارة الصحـــــة العامـــــة
Ministry of Public Health
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Version History

Version	Status	Date	Editor	Description
1.0	Final	5th January 2020	Guideline Team	Final version for publication.

Citation

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Abbreviations

The abbreviations used in this guideline are as follows:

CBT	Cognitive Behavioural Therapy
GAD	Generalised Anxiety Disorder
GAD-2	2-Item Screening Tool for GAD
GAD-7	7-Item Screening Tool for GAD
SNRI	Serotonin Norepinephrine Reuptake Inhibitor
SSRI	Selective Serotonin Reuptake Inhibitor
TCA	Tricyclic Antidepressant

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1 Information About this Guideline

1.1 Objective and Purpose of the Guideline

The purpose of this guideline is to define the appropriate diagnosis and management of Generalised Anxiety Disorder (GAD) in adults aged 18 years and above. The objective is to improve the appropriate prescribing and referral of patients presenting to any provider organisation in Qatar. It is intended that the guideline will be used primarily by physicians in primary care and specialist outpatient settings.

1.2 Scope of the Guideline

The following aspects of care are included within this guideline:

- Clinical presentation, diagnosis and management of Generalised Anxiety Disorder in people aged 18 years of age and older.
- Management includes discussion of treatment with both psychological and pharmacological therapies.
- The diagnosis and management of anxiety in pregnancy, the puerperium and postnatal periods, are not addressed in this guideline.

1.3 Editorial Approach

This guideline document has been developed and issued by the Ministry of Public Health of Qatar (MOPH), through a process which aligns with international best practice in guideline development and localisation. The guideline will be reviewed on a regular basis and updated to incorporate comments and feedback from stakeholders across Qatar.

The editorial methodology, used to develop this guideline, has involved the following critical steps:

- Extensive literature search for well-reputed published evidence relating to the topic.
- Critical appraisal of the literature.
- Development of a draft summary guideline.
- Review of the summary guideline with a Guideline Development Group, comprised of practising healthcare professionals, subject matter experts and patient representatives, from across Qatar.
- Independent review of the guideline by the National Clinical Guidelines & Pathways Committee, appointed by the MOPH, from amongst stakeholder organisations across Qatar.

Whilst the MOPH has sponsored the development of the guideline, the MOPH has not influenced the specific recommendations made within it.

1.4 Sources of Evidence

The professional literature has been systematically queried using specially developed, customised, and tested search strings. Search strategies are developed to allow efficient yet comprehensive analysis of relevant publications for a given topic and to maximise retrieval of articles with certain desired characteristics pertinent to a guideline.

For each guideline, all retrieved publications have been individually reviewed by a member of the Editorial Team and assessed in terms of quality, utility, and relevance. Preference is given to publications that:

1. Are designed with rigorous scientific methodology.
2. Are published in higher-quality journals.
3. Address an aspect of specific importance to the guideline in question.

Further information about the literature search and appraisal process is included in *Appendix B*.

1.5 Evidence Grading and Recommendations

Recommendations made within this guideline are supported by evidence from the medical literature and where possible the most authoritative sources have been used in the development of this guideline. In order to provide insight into the evidence basis for each recommendation, the following evidence hierarchy has been used to grade the level of authoritativeness of the evidence used, where recommendations have been made within this guideline.

Where the recommendations of international guidelines have been adopted, the evidence grading is assigned to the underlying evidence used by the international guideline. Where more than one source has been cited, the evidence grading relates to the highest level of evidence cited:

- **Level 1 (L1):**
  - Meta-analyses.
  - Randomised controlled trials with meta-analysis.
  - Randomised controlled trials.
  - Systematic reviews.

- **Level 2 (L2):**
  - Observational studies, examples include:
    - Cohort studies with statistical adjustment for potential confounders.
    - Cohort studies without adjustment.
    - Case series with historical or literature controls.
    - Uncontrolled case series.
  - Statements in published articles or textbooks.

- **Level 3 (L3):**
  - Expert opinion.
  - Unpublished data, examples include:
    - Large database analyses.
    - Written protocols or outcomes reports from large healthcare provider organisations.

In order to give additional insight into the reasoning underlying certain recommendations and the strength of recommendation, the following recommendation grading has been used, where recommendations are made:

- **Recommendation Grade A (RGA):** Evidence demonstrates at least moderate certainty of a net benefit from the recommendation.
- **Recommendation Grade B (RGB):** Evidence is insufficient, conflicting, or poor and demonstrates an incomplete assessment of net benefit versus harm; additional research is recommended.
- **Recommendation Grade C (RGC):** Evidence demonstrates potential harm that outweighs benefit; additional research is recommended.
- **Recommendation of the GDG (R-GDG):** Recommended best practice on the basis of the clinical experience of the Guideline Development Group members.

1.6 Guideline Development Group Members

The following table lists members of the Guideline Development Group (GDG) nominated by their respective organisations and the National Clinical Guidelines & Pathways Committee. The GDG members have reviewed and provided their feedback and approval of the guideline document. Each member has completed a declaration of conflicts of interest, which has been reviewed and retained by the MOPH.

Guideline Development Group Members		
Name	**Title**	**Organisation**
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1.7 National Clinical Guidelines & Pathways Committee Members

The following table lists members of the National Clinical Guidelines & Pathways Committee (NCGPC), appointed by the MOPH. The NCGPC members have reviewed and provided their feedback and approval of the guideline document. Each member has completed a declaration of conflicts of interest, which has been reviewed and retained by the MOPH.

National Clinical Guidelines & Pathways Committee (NCGPC) members		
Name	**Title**	**Organisation**
Ms Huda Amer Al-Katheeri	Chair of the NCGPC, Director of Strategic Planning & Performance Department	Ministry of Public Health
Shk Dr Mohammed Hamad J. Al Thani	Co-Chair of the NCGPC, Director of Public Health	Ministry of Public Health
Prof Anthony Akobeng	Chair Clinical Practice Guidelines Committee	Sidra Medicine
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Dr Chris Kenny	Executive Director Clinical and Service Development, Office of the Chief Medical Officer	Hamad Medical Corporation
Dr Egon Toft	VP and Dean of College of Medicine	College of Medicine, Qatar University

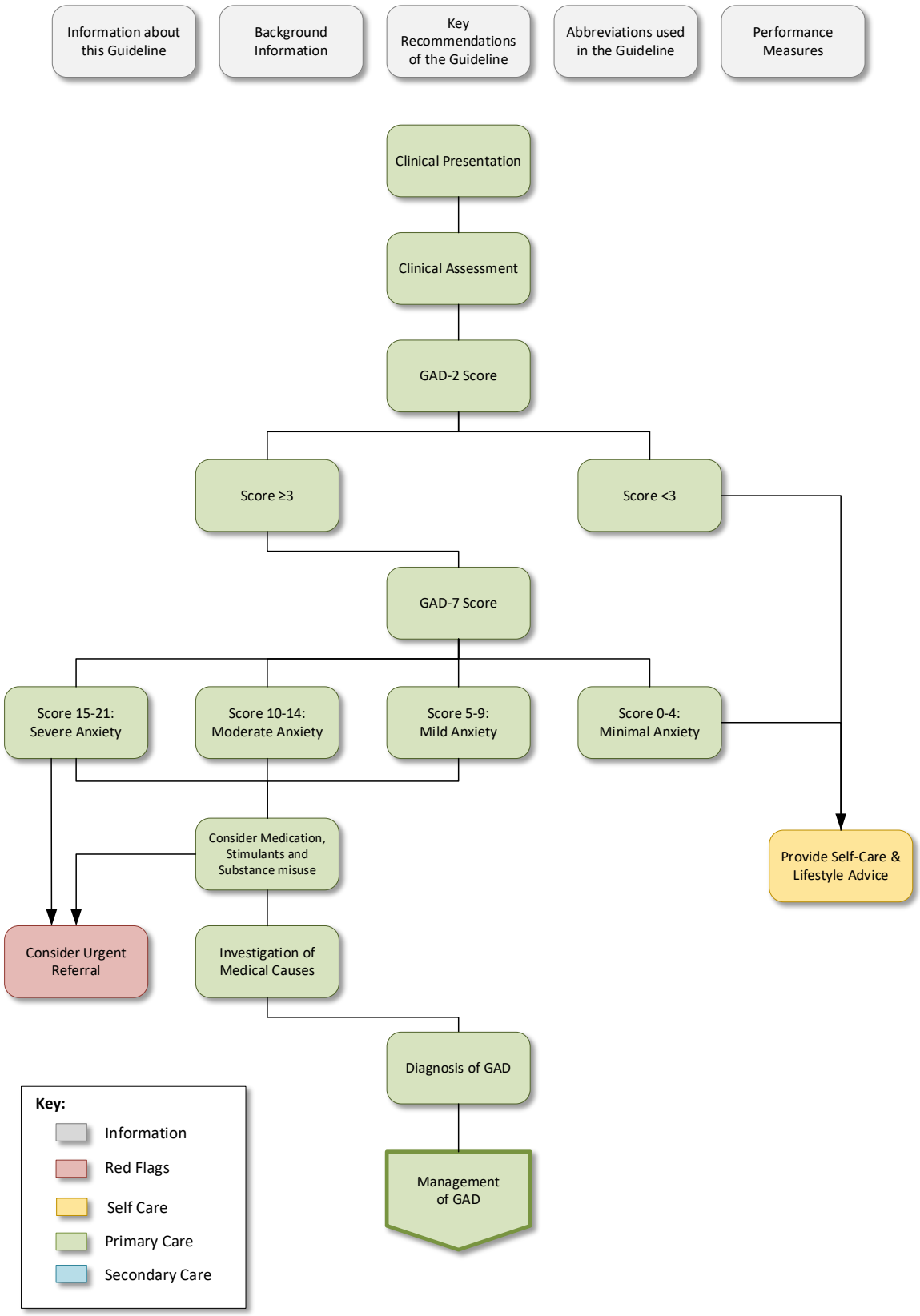
1.8 Responsibilities of Healthcare Professionals

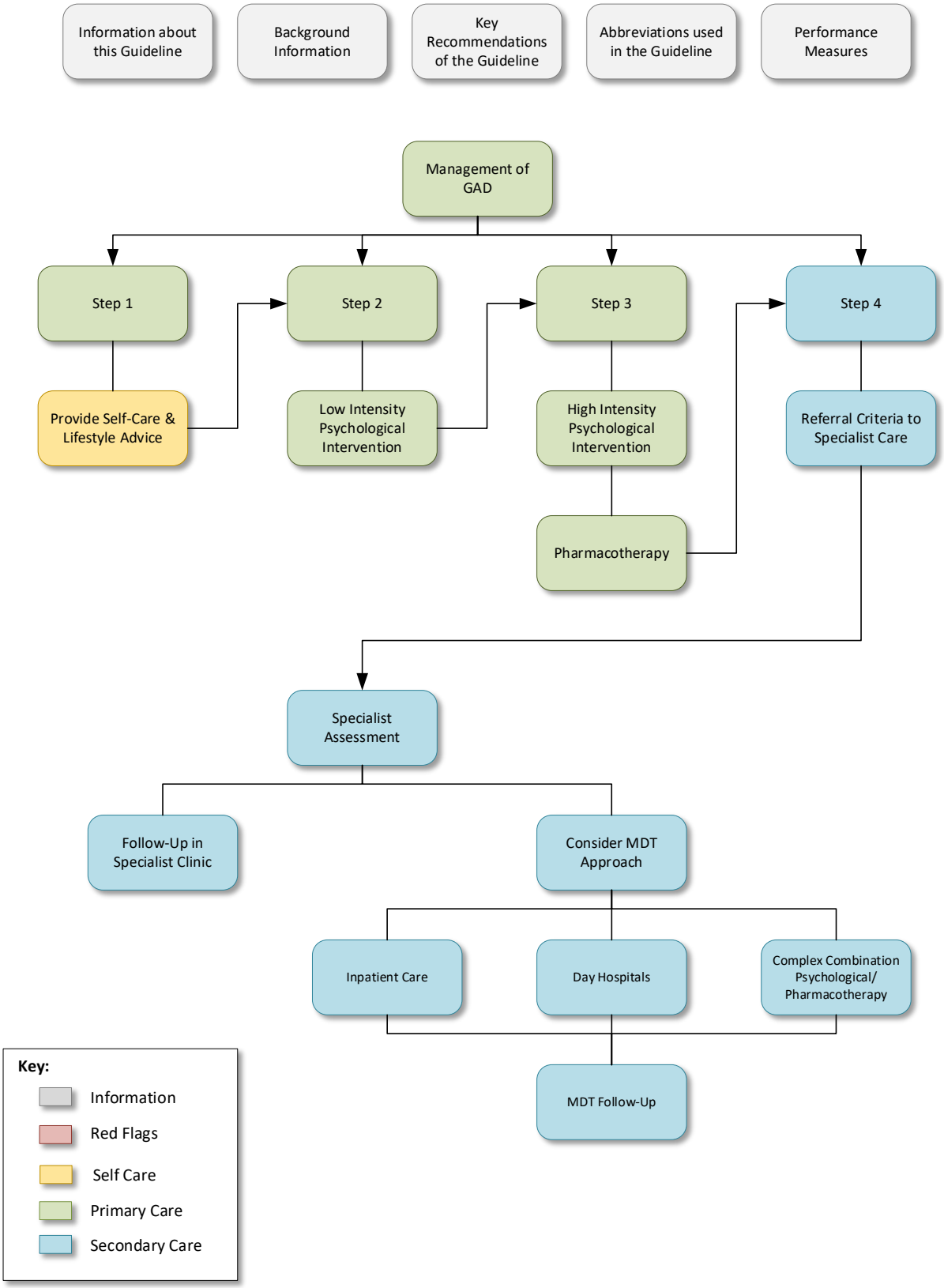
This guideline has been issued by the MOPH to define how care should be provided in Qatar. It is based upon a comprehensive assessment of the evidence as well as its applicability to the national context of Qatar. Healthcare professionals are expected to take this guidance into account when exercising their clinical judgement in the care of patients presenting to them.

The guidance does not override individual professional responsibility to take decisions which are appropriate to the circumstances of the patient concerned. Such decisions should be made in consultation with the patient, their guardians, or caregivers and should consider the individual risks and benefits of any intervention that is contemplated in the patient's care.

2 Generalised Anxiety Disorder Diagnosis & Management Pathway

Click on a box below to see the relevant page of the Pathway.

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3 Key Recommendations of the Guideline

The key recommendations of this guideline are as follows:

Clinical Presentation (*Section 5*):

- People with the somatic symptoms listed in *Section 5* should also be evaluated for possible GAD, once a physical cause has been excluded [**L1, RGA**][1].
- The use or withdrawal of some medications, stimulants and illicit substances can cause anxiety symptoms[1].
- Their use should be ruled out as a possible cause of anxiety symptoms before a diagnosis of GAD can be confirmed [2] (see also *Section 7*).

Screening (*Section 6*):

- If GAD is suspected, use the GAD-2 or GAD-7 scoring tools to assess for symptoms and severity of anxiety.
- Scoring tools should always be used in conjunction with clinical judgement [**R-GDG**].

Investigations (*Section 7*):

- Before a diagnosis of GAD can be made, physical causes, which may present with symptoms of anxiety, should be excluded by taking a history and if necessary arranging appropriate investigations [2].
- Investigations that may be considered include [**R-GDG**]:
    - Complete Blood Count.
    - Urea and Electrolytes.
    - Liver Function Tests.
    - Thyroid Function Tests.
    - Urine drug screen.

Diagnosis (*Section 8*):

- DSM-5 criteria listed in *Section 8* should be used to formally make a diagnosis of GAD [2].
- GAD should be differentiated from other disorders where there are prominent anxiety symptoms (e.g. panic disorder, post-traumatic stress disorder and social anxiety disorder – the GAD7 is moderately good at screening for these disorders).
- If GAD exists with a comorbid depressive or another anxiety disorder or substance use disorder, the disorder that is most severe (i.e. the primary disorder) should usually be prioritised in treatment.

Management in Primary Care (*Section 9*):

- The Stepped Care Model described in *Section 9.1* should be used to manage patients with GAD.
- Patients should be managed in a primary care setting from Step 1 to Step 3, except where referral criteria to Specialist Care, have been met, or resource limitations prevent implementation of Steps 2 and 3 in a primary care setting [**R-GDG**].

Pharmacological Therapy (*Section 9.2*):

- Where medication is available, the first line and second line therapies listed in *Section 9.2* can be used in a primary care setting [**R-GDG**].
- Third line medication should only be prescribed by a specialized Mental Health Service [**R-GDG**].

- All prescriptions should be issued in line with the *Qatar National Formulary* and take into consideration the patient's individual circumstances [**R-GDG**].
- Monitor the patient every 2 – 4 weeks until there is a significant improvement and then once every 3 months, to evaluate the ongoing effectiveness of the prescribed medication and any side effects[1,3–5].

Referral Criteria to Specialist Care (*Section 10*):

- Patients should be referred to secondary/specialist care if any of the following apply [1,3,4] [**L1, RGA**]:
    - The patient did not respond to treatment offered at Step 3.
    - The patient has severe anxiety and functional impairment.
    - The patient has any of the following:
        - Risk of suicide or self-harm.
        - Self-neglect.
        - Substance abuse.
        - Complex physical or mental health problems.
        - Requires a specialist assessment for work or education [**R-GDG**].
        - Family conflicts [**R-GDG**].

Specialist Management (*Section 11*):

- Based on the specialist assessment, the patient may be managed in an outpatient setting by either a psychiatrist or psychologist [**R-GDG**].
- If the patient has more complex needs, then a multidisciplinary approach may be required [**R-GDG**].
- The specialist and/or MDT should offer a combination of psychological and pharmacological treatments according to the patient's requirements and previous treatments[1,3–5] [**L1, RGA**].
- Treatment may include [**R-GDG**]:
    - Complex pharmacological and/or psychological treatment regimens.
    - Day hospitals.
    - Inpatient care.
    - Management of psychiatric comorbidly

4 Background Information

4.1 Definition

Generalised Anxiety Disorder (GAD) is defined as the excessive, ongoing and uncontrollable anxiety and worry that could interfere with the person's ability to function[6]. The anxiety is not usually associated with reasonable causes.

4.2 Incidence and Prevalence in Qatar

Globally, the prevalence of GAD is 3.7% with higher lifetime prevalence in the developed countries compared to developing countries [7].

In Qatar, a prospective cross-sectional study was performed in 2009 and it involved 1,660 participants aged 18 to 65 years old. The study concluded that the prevalence rate of GAD is 10.3%[8].

A 2015 study in Qatar, involving 1475 locals and Arab expatriates, revealed that the prevalence rates of GAD was 10.4%[9].

4.3 Risk Factors

The risk factors for developing GAD include [10]:

- Gender: Women are more prone to developing GAD (ratio of female to male is 2:1).
- Family history of anxiety disorders.
- Substance abuse: smoking, alcohol or illicit substances.
- Medical conditions: people with chronic diseases are at higher risk of developing GAD.
- Socioeconomic factors (such as unemployment, low level of education and living alone).
- History of depression and other anxiety disorders.
- History of self-harm and or suicide attempts
- Stressful life events in susceptible people such as adverse childhood experience or trauma in childhood, bereavement, loss of employment, divorce or domestic abuse.

Comorbid psychiatric disorders that often coexist with GAD include[3,11,12]:

- Major depressive disorder (70%).
- Bipolar disorder (~50%).
- Substance use disorder (33%).
- Dysthymia.
- Simple phobia.
- Social anxiety disorder.
- Panic disorder
- Agoraphobia

5 Clinical Presentation

People with GAD may present with the following symptoms and signs. Persistent symptoms for greater than 6 months, should prompt consideration of GAD [2]:

- Excessive anxiety and worry (i.e. apprehensive expectation) causing significant distress and impairment of ability to function.
- Physical symptoms of:
    - Restlessness.
    - Fatigue.
    - Difficulty concentrating.
    - Irritability.
    - Muscle tension.
    - Sleep disturbance – difficulty falling or staying asleep, restless or interrupted sleep.

People with the following somatic symptoms should also be evaluated for possible GAD, once an underlying physical cause has been excluded [**L1, RGA**][1]:

- Palpitations **[R-GDG]**.
- Dizziness **[R-GDG]**.
- Tinnitus **[R-GDG]**.
- Muscle pain.
- Headaches.
- Gastrointestinal disturbance.
- Backaches.
- Respiratory problems.

The use or withdrawal of some medications, stimulants and illicit substances can cause anxiety symptoms. These include[1]:

- Corticosteroids.
- Inhaled beta-agonists.
- Anticonvulsants (carbamazepine, ethosuximide).
- Antibiotics (quinolones, isoniazid).
- Thyroid hormones.
- Oestrogens.
- Sympathomimetics (e.g., pseudoephedrine, phenylephrine).
- Psychostimulants.
- Antihistamine or Anticholinergics toxicity.
- Alternative medications e.g. ginseng and ephedra.
- Nicotine.
- Caffeine.
- Alcohol.
- Illicit substances e.g. cocaine, amphetamines etc.

The use of the above medication and substances should be excluded as possible causes of anxiety symptoms before a diagnosis of GAD can be made [2] (see also *Section 8*).

Clinical Assessment of a patient presenting with symptoms of anxiety should also incorporate:

- Determining the distress and functional impairment caused by anxiety symptoms.
- Identifying whether there are any comorbid disorders (psychiatric and physical).
- Determining the past history of anxiety and if so its response to treatment.

6 Screening

If GAD is suspected, screening tools can be used in a primary care setting [**L1, RGA**][1]. The recommended tools for use in Qatar are:

- GAD-2
- GAD-7

NB: Screening tools should always be used in conjunction with clinical judgement and as part of a comprehensive clinical assessment [**R-GDG**].

6.1 GAD-2 Score

GAD-2 is the two-item abridged version of the longer GAD-7 scoring system (see below). GAD-2 is evaluated by summating the scores resulting from the following two questions[13]:

Over the last two weeks, how often have you been bothered by the following problems?	Not at all	Several days	More than half the days	Nearly every day
1 Feeling nervous, anxious or on edge	0	1	2	3
2 Not being able to sleep or control worrying	0	1	2	3

Table 6.1: GAD-2 Scoring Tool[13].

A total score of ≥3 indicates possible anxiety and should prompt more detailed assessment using the full GAD-7 Screening tool[13].

6.2 GAD-7 Score

The GAD-7 tool helps with GAD screening and evaluating the severity of anxiety, in addition to monitoring the effect of therapy over time [14].

Over the last two weeks, how often have you been bothered by the following problems?	Not at all	Several days	More than half the days	Nearly every day
1 Feeling nervous, anxious or on edge	0	1	2	3
2 Not being able to sleep or control worrying	0	1	2	3
3 Worrying too much about different things	0	1	2	3
4 Trouble relaxing	0	1	2	3
5 Being so restless that it is hard to sit still	0	1	2	3
6 Becoming easily annoyed or irritable	0	1	2	3
7 Feeling afraid, as if something awful might happen	0	1	2	3

Table 6.2(1): GAD-7 Scoring Tool[14].

The table below classifies the severity of the patient's anxiety, based on the total score of answers to each of the 7 questions:

GAD-7 Score	Classification
0 – 4	Minimal anxiety
5 – 9	Mild anxiety
10 – 14	Moderate anxiety
15 – 21	Severe anxiety

Table 6.2(2): Classification of anxiety based on the GAD-7 score [14].

The GAD-7 is freely available for use in multiple languages from the following website: https://www.phqscreeners.com/select-screener. **English and Arabic versions of the GAD are also included in *Appendix A*.**

NB:

- The above screening tools do not confirm GAD, and a formal diagnosis of GAD is only made using the DSM-5 criteria (see *Section 8*).
- Depression can occur in combination with GAD and if present, can lengthen the duration and severity of GAD. Therefore, it is important to use depression screening tools to identify people with comorbid depression.
- See also MOPH National Clinical Guideline: The Diagnosis and Management of Depression in Adults (2019)[15].
- Key points in the clinical assessment should include
    - Being aware that patients are often reluctant to present with psychological symptoms and may find it difficult to discuss emotional problems.
    - Determining the distress and functional impairment caused by anxiety symptoms.
    - Identifying whether there are any comorbid disorders (psychiatric and physical).
    - Determining if there is any previous history of anxiety and if so its response to treatment.

7 Investigations

Before a diagnosis of GAD can be made, physical causes, which may present with symptoms of anxiety, should be excluded by taking a history and if necessary arranging appropriate investigation [2].

Investigations that may be appropriate include [**R-GDG**]:

- Complete Blood Count.
- Urea and Electrolytes.
- Liver Function Tests.
- Thyroid Function Tests.
- Urine drug screen

Further investigation should be directed according to the clinical presentation [**R-GDG**].

8 Diagnosis

8.1 DSM-5 Criteria

Use DSM-5 diagnostic criteria given in *Table 8.1* below to make a diagnosis of GAD [2] [**L1, RGA**]:

Criterion	Symptoms and signs
Excessive anxiety and worry	Occurring more days than not for at least 6 months, about a number of events or activities (such as work or school performance).
Uncontrollable worry	The individual finds it difficult to control the worry.
Worry associated with 3 or more symptoms (with at least some symptoms having been present for more days than not for the past 6 months)	• Restlessness or feeling keyed up or on edge. • Being easily fatigued. • Difficulty concentrating or mind going blank. • Irritability. • Muscle tension. • Sleep disturbance (difficulty falling or staying asleep, or restless, unsatisfying sleep).
Functional disturbance	The anxiety, worry or physical symptoms cause clinically significant distress or impairment in social, occupational, or other important areas of functioning.
Notes	
• The disturbance is not attributable to the physiological effects of a substance (e.g., a drug of abuse, a medication) or another medical condition (e.g. hyperthyroidism). • The disturbance is not better explained by another mental disorder (e.g., anxiety or worry about having panic attacks in panic disorder, negative evaluation in social anxiety disorder [social phobia], contamination or other obsessions in obsessive-compulsive disorder, separation from attachment figures in separation anxiety disorder, reminders of traumatic event in posttraumatic stress disorder, gaining weight in anorexia nervosa, physical complaints in somatic symptom disorder, perceived appearance flaws in body dysmorphic disorder, having a serious illness in illness anxiety disorder, or the content of delusional beliefs in schizophrenia or delusional disorder).	

Table 8.1: GAD DSM-5 Diagnostic criteria [2].

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9 Primary Care Management

9.1 Stepped Care Model

NB:

- If the patient is diagnosed with other anxiety disorders or with depression, the primary focus of treatment should be on the most severe disorder first, as this will improve the overall condition and functioning of the patient [4,5] [**L1, RGA**].
- Consider the impact of the condition on the family of the patient and consider offering a regular assessment of their physical and mental wellbeing [3–5] [**L1, RGA**].

The treatment of GAD patients should involve management of the following[1] [**L1, RGA**]:

- **Acute phase:**
  - Aims to reduce the severity of symptoms, improve the functional status of the patient, achieve remission and reduce undesirable side effects.
- **Maintenance phase:**
  - Aims to prevent relapse, achieve a better quality of life and control side effects.

A Stepped Care Model is used to manage GAD and ensure that the individual receives the most effective and least intrusive intervention [1,3,4].

- Step 1: Assessment of symptom severity, self-care education and active monitoring of symptoms.
- Step 2: Diagnosis of GAD unresponsive to Step 1, low intensity psychosocial interventions.
- Step 3: High intensity psychosocial interventions or pharmacological interventions.
- Step 4: Specialist referral for complex pharmacological and psychosocial interventions and multidisciplinary approach.

The factors determining which Step of treatment should be initiated first are presented in *Table 9.1* [1,3,4].

Steps	Factors applicable
Step 1	• Only few symptoms. • Symptoms lasting <6 months. • Mild distress and no or limited functional impairment. • Absence of comorbid anxiety or mood disorder. • Patient refusing active treatment options.
Step 2	• Patient who did not benefit from Step 1 interventions. • DSM-5 criteria for GAD met. • Presence of comorbid anxiety or mood disorder. • Significant distress and/or functional impairment. • Patient accepting active treatment for GAD.
Step 3	• Patient who did not benefit from Step 2 interventions. • Significant functional impairment. • History of anxiety or mood disorders.
Step 4	• Patient is unresponsive to CBT and drug treatment. • Presence of several psychiatric comorbidities. • Suicidal thoughts. • Significant functional impairment (e.g., self-neglect).

Table 9.1: Classification of Stepped Care Model [1,3,4]..

9.1.1 Management at Step 1

Management of patients at Step 1 includes:

- Encourage lifestyle changes[4,5] [**L1, RGA**]:
  - Avoid substances that trigger anxiety such as caffeine, nicotine and any illicit substances.
  - Reduce work/home stress.
  - Sleep hygiene for improvement in quantity and quality of sleep.
  - Exercise to improve cognitive functions and psychological wellbeing.
- Avoid precipitating factors.
- Provide educational material for self-help about anxiety.
- Monitor symptoms on a regular basis and reassess using GAD-7.

9.1.2 Management at Step 2

Management at Step 2 includes:

- All activities provided at Step 1.
- Low intensity psychological interventions should be offered, where available. These include [4,5] [**L1, RGA**]:
  - Individual non-facilitated self-help.
  - Individual guided self-help.
  - Psychoeducational groups.
- The principles of these interventions are presented in *Table 9.1.2*[4].

Intervention	Description
Individual non-facilitated self-help	• Limited contact with the therapist (occasional 5-min call). • Involves age appropriate written or electronic materials and instructions to use these materials systemically for at least 6 weeks. • Based on the principles of cognitive behavioural therapy (CBT).
Individual guided self-help	• Involves age-appropriate written or electronic materials. • A trained practitioner* is involved to facilitate the self-help and monitor the progress and outcomes of the interventions. • 5 – 7 weekly or fortnightly sessions (20 – 30 min) over the telephone or face-to-face. • Based on the principles of CBT.
Psychoeducational groups	• Involves presentations and self-help manuals with interactive design, to promote observational learning. • Based on the principles of CBT. • 6 weekly sessions (2 hours each), involving 12 patients and 1 trained practitioner.

Table 9.1.2: Principles of low intensity psychological interventions for GAD [4].
*A 'trained practitioner' is someone who can strictly follow treatment protocols and demonstrate doing so using measurable outcomes.

If the above services are unavailable in a primary care setting, patients should be referred to appropriate specialist services [**R-GDG**].

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9.1.3 Management at Step 3

Management at Step 3 comprises of:

- High-intensity psychological interventions.
- Pharmacological therapy, if appropriate (see *Section 9.2* below).

High-intensity psychological interventions for GAD, involve [1,3–5] [**L1, RGA**]:

- CBT:
  - Provided by trained practitioners.
  - 12 – 15 weekly sessions (of at least 1 hour each), depending on the rate of recovery.
- Applied relaxation:
  - Provided by trained practitioners.
  - 12 – 15 weekly sessions (of at least 1 hour each), depending on the rate of recovery.

All interventions should be completed in the preferred language of the patient [4]. The efficacy of the treatment should be evaluated using serial assessment of the patient using GAD-7 [**R-GDG**].

If the above services are unavailable in a primary care setting, patients should be referred to appropriate specialist services [**R-GDG**].

9.1.4 Management at Step 4

All patients with GAD who are unresponsive to treatment at Step 3 and/or who have severe impairment of daily function, should be referred to Specialist services for review and treatment [**R-GDG**].

9.2 Pharmacological Therapy

Pharmacological therapy is offered to patients with GAD, who do not respond to low-intensity or high-intensity psychological treatment, or those with severe functional impairment (i.e. those at Step 3 or Step 4) [1,3–5] [**L1, RGA**]. Pharmacological therapy can also be offered to patients with moderate-severe GAD, who prefer not to engage with psychological therapy [**R-GDG**].

Prior to commencing pharmacotherapy, the healthcare provider should inform the patient about the available treatment options and provide information about [1,3–5] [**L1, RGA**]:

- The expected outcome for each treatment.
- The possibility of side effects, drug interactions and withdrawal syndromes of each medication.
- The gradual development of anxiolytic effects over the period of several weeks.
- The importance of taking the prescribed medication as indicated.
- The importance of continuing to take the prescribed medication if it is effective for at least one year after remission to avoid relapse.

The following medications can be used for the treatment of GAD [1,3–5] [**L1, RGA**]:

- **First Line:**
  - Selective serotonin reuptake inhibitors (SSRIs).
  - Serotonin norepinephrine reuptake inhibitors (SNRIs).
  - Propranolol should only be used if there are somatic features such as palpitation, tachycardia, sweating etc. [**R-GDG**].

- **Second Line:**
  - Benzodiazepines.
    - Not offered routinely and should only be used for short period to control severe symptoms of anxiety, when needed[1,3–5].
  - Tricyclic antidepressants (TCA).
    - Associated with a greater burden of side effects than either SSRIs or SNRIs
  - Azapirone (buspirone).

- **Specialist Medication:**
  - Quetiapine.
  - Atypical antidepressants including mirtazapine, vortioxetine and agomelatine
  - Trazodone.

All prescriptions should be issued in line with the *Qatar National Formulary* and take into consideration the patient's individual circumstances [**R-GDG**].

In case of side effects, consider reducing the dose of the prescribed medication or offer an alternative treatment option depending on the patient's preference [1,3–5].

Monitor the patient every 2 – 4 weeks until there is a significant improvement and then once every 3 months, to evaluate the ongoing effectiveness of the prescribed medication and any side effects[1,3–5].

NB:

- If the patient does not respond to pharmacological treatment, offer high-intensity psychological interventions, if not previously offered, or consider changing the prescribed medication[1,3–5,16,17].
- If the patient has a partial response to a prescribed medication, offer the patient additional psychological therapies [1,3–5,16,17].
- The maximum dose of medication should not be exceeded and instead combination therapy should be attempted if monotherapy is ineffective [**R-GDG**].
- Be aware that the risk of side effects increases with combination therapy or when the dose of one medication is increased [1,3–5] [**L1, RGA**].

10 Referral Criteria to Specialist Care

Patients should be referred to specialist care if any of the following apply [1,3,4] [**L1, RGA**]:

- The patient did not respond to treatment offered at Step 3.
- The patient has severe anxiety and functional impairment.
- The patient has any of the following:
  - Risk of suicide or self-harm.
  - Self-neglect.
  - Substance abuse.
  - Complex physical or mental health problems.
  - Requires a specialist assessment for work or education [**R-GDG**].

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11 Specialist Management

11.1 Specialist Assessment

Upon referral, the specialist must evaluate the physical and mental wellbeing of the patient and their needs and assess the following [1,3–5] [**L1, RGA**]:

- Review of the diagnosis [**R-GDG**].
- Duration and complexity of symptoms.
- Comorbidities.
- Current and past treatments and their effect.
- Adherence to pharmacological treatments.
- Effectiveness of previous psychological interventions and therapies.
- Possibility of self-harm.
- Degree of self-neglect and functional impairment.
- Home environment and impact on family and carers.
- Community support.
- Previous and current coping strategies.

Based on the specialist assessment, the patient may be managed in an outpatient setting by either a psychiatrist or psychologist [**R-GDG**]. If the patient has more complex needs, then a multidisciplinary approach may be required [**R-GDG**].

11.2 Multidisciplinary Approach

Complex patients with GAD should ideally be managed in a multidisciplinary team, which comprises of the following [**R-GDG**]:

- Psychiatrist.
- Psychologist.
- Social Worker.
- Specialist Nurse.
- Case Manager.
- Pharmacist.
- Health Educator.
- Occupational Therapist.

The specialist and/or MDT should offer a combination of psychological and pharmacological treatments according to the patient's requirements and previous treatments[1,3–5] [**L1, RGA**]. Treatment may include [**R-GDG**]:

- Complex pharmacological and/or psychological treatment regimens.
- Day hospitals.
- Inpatient care.

NB:

- The treatment plan should be discussed with the patient, who should be actively involved in the decision-making process [1,3–5] [**L1, RGA**].
- If the patient has refused some of the treatments that were offered in previous Steps, provide information about the benefits of these treatments and encourage the patient to try them [1,3–5] [**L1, RGA**].

12 Key Considerations for Patient Preferences

Patient preferences refer to patient perspectives, beliefs, expectations, and goals for health and life, and to the steps employed by individuals in assessing the potential benefits, harms, costs, and limitations of the management options in relation to one another. Patients may have preferences when it comes to defining their problems, identifying the range of management options and selecting or ranking the outcomes used to compare these options.

It is important for healthcare professionals to develop an understanding of the patient as an individual and the unique way in which each person experiences a condition and its impact on their life.

The following recommendations are therefore made for physicians and other healthcare professionals regarding general principles of patient care in Qatar:

- **Respect Patients:** Treat patients with respect, kindness, dignity, courtesy and honesty. Ensure that the environment is conducive to discussion and that the patient's privacy is respected, particularly when discussing sensitive, personal issues. Ask the patient how they wish to be addressed and ensure that their choice is respected and used.

- **Maintain Confidentiality:** Respect the patient's right to confidentiality and avoid disclosing or sharing patients' information without their informed consent. In this context, students and anyone not directly involved in the delivery of care should first be introduced to the patient before starting consultations or meetings, and let the patient decide if they want them to stay.

- **Clarify Third-Party Involvement:** Clarify with the patient at the first point of contact whether and how they like their partner, family members or carers to be involved in key decisions about their care or management and review this regularly. If the patient agrees, share information with their partner, family members or carers.

- **Obtain Informed Consent:** Obtain and document informed consent from patients, in accordance with MOPH policy and guidance.

- **Encourage Shared Decision Making:** Ensure that patients are involved in decision making about their own care, or their dependent's care, and that factors that could impact the patient's participation in their own consultation and care including physical or learning disabilities, sight, speech or hearing impairments and problems with understanding, reading or speaking English are addressed.

- **Disclose Medical Errors:** Disclose errors when they occur and show empathy to patients.

- **Ensure Effective Communication:** Explore ways to improve communication including using pictures, symbols or involving an interpreter or family members. Avoid using medical jargon. Use words the patient will understand and confirm understanding by asking questions.

- **Ensure Continuity of Care:** Provide clear and timely sharing of patient information between healthcare professionals especially at the point of any transitions in care.

13 Performance Measures

A list of performance measures is given in the table below. Healthcare organisations are encouraged to monitor service performance using the indicator definitions below [18,19].

Number	Numerator	Denominator
AN01	Number of patients diagnosed with GAD who have a GAD-7 Score recorded prior to initial treatment.	Total number of patients aged over 18 years with a recorded diagnosis of GAD.
AN02	Number of patients diagnosed with GAD who have their response to treatment recorded using the GAD-7 Tool.	Total number of patients aged over 18 years with a recorded diagnosis of GAD.

Table 13.1: Performance measures [18,19].

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Appendix A: Screening Tools for GAD in English & Arabic

The following documents are included in *Appendix A*:

- GAD-7 Scoring Tool in English.
- GAD-7 Scoring Tool in Arabic.

GAD-7

Over the last 2 weeks, how often have you been bothered by the following problems? *(Use "✔" to indicate your answer)*	**Not at all**	**Several days**	**More than half the days**	**Nearly every day**
1. Feeling nervous, anxious or on edge	0	1	2	3
2. Not being able to stop or control worrying	0	1	2	3
3. Worrying too much about different things	0	1	2	3
4. Trouble relaxing	0	1	2	3
5. Being so restless that it is hard to sit still	0	1	2	3
6. Becoming easily annoyed or irritable	0	1	2	3
7. Feeling afraid as if something awful might happen	0	1	2	3

(*For office coding: Total Score T*____ = ____ + ____ + ____)

GAD-7

خلال **الأسبوعين الماضيين**، كم مرّة أقلقتك المشاكل التّالية؟ *(ضع علامة "✓" للإشارة لجوابك)*	أبداً	بعض الأيام	أكثر من نصف الأيام	كل يوم تقريباً
1- الشعور بالغضب أو القلق أو الانفعال الشديد.	0	1	2	3
2- عدم القدرة على إنهاء القلق أو التحكّم فيه.	0	1	2	3
3- القلق المفرط على أشياء مختلفة.	0	1	2	3
4- الصعوبة في الاسترخاء.	0	1	2	3
5- شدة الاضطراب لدرجة صعوبة البقاء في هدوء.	0	1	2	3
6- السرعة في الانزعاج أو الانفعال.	0	1	2	3
7- الشّعور بالخوف كما لو أن شيئا فضيعا قد يحدث.	0	1	2	3

(_____ + _____ + _____ =T*otal Score T*_____ *For office coding*)

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Appendix B: Detailed Description of the Literature Search

A systematic search for existing literature on GAD, PTSD and OSD disorders was performed in the period July 2nd – August 8th, 2019.

The search for clinical practice guidelines on GAD diagnosis and/or management was performed in the *PubMed* database and websites of relevant organisations and societies including the *American Psychiatric Association*, the *British Association for Psychopharmacology, and* the *American College of Clinical Pharmacy*. The present guideline is primarily based on UK NICE, and Canadian guidelines and is supplemented with other relevant studies.

Peer-reviewed scientific publications were found in PubMed and via *Google Scholar* Internet search engine. Non-peer reviewed studies were identified in *bioRxiv*. Books were checked on *Amazon* and via *Google* and *Google Scholar* search engines. Personal opinions of healthcare professionals, information published on medical websites, and drug prescribing information sheets were found via Google search engine.

The included publications were identified using the terms "generalized anxiety" and specified with the following terms in combinations:

Guideline, epidemiology, definition, prevalence, risk factors, screening, GAD-7, GAD-2, diagnosis, differential diagnosis, symptoms, life-style, DSM-5, management, treatment, stepped-care, psychological therapy, pharmacological therapy, alternative therapy, SSRI, SNRI, TCA, antipsychotics, pregabalin, benzodiazepine, clomipramine, contradictions, side effects, referral, augmentation.

Figure B.1 below outlines graphically the results of the search and application of exclusion criteria.

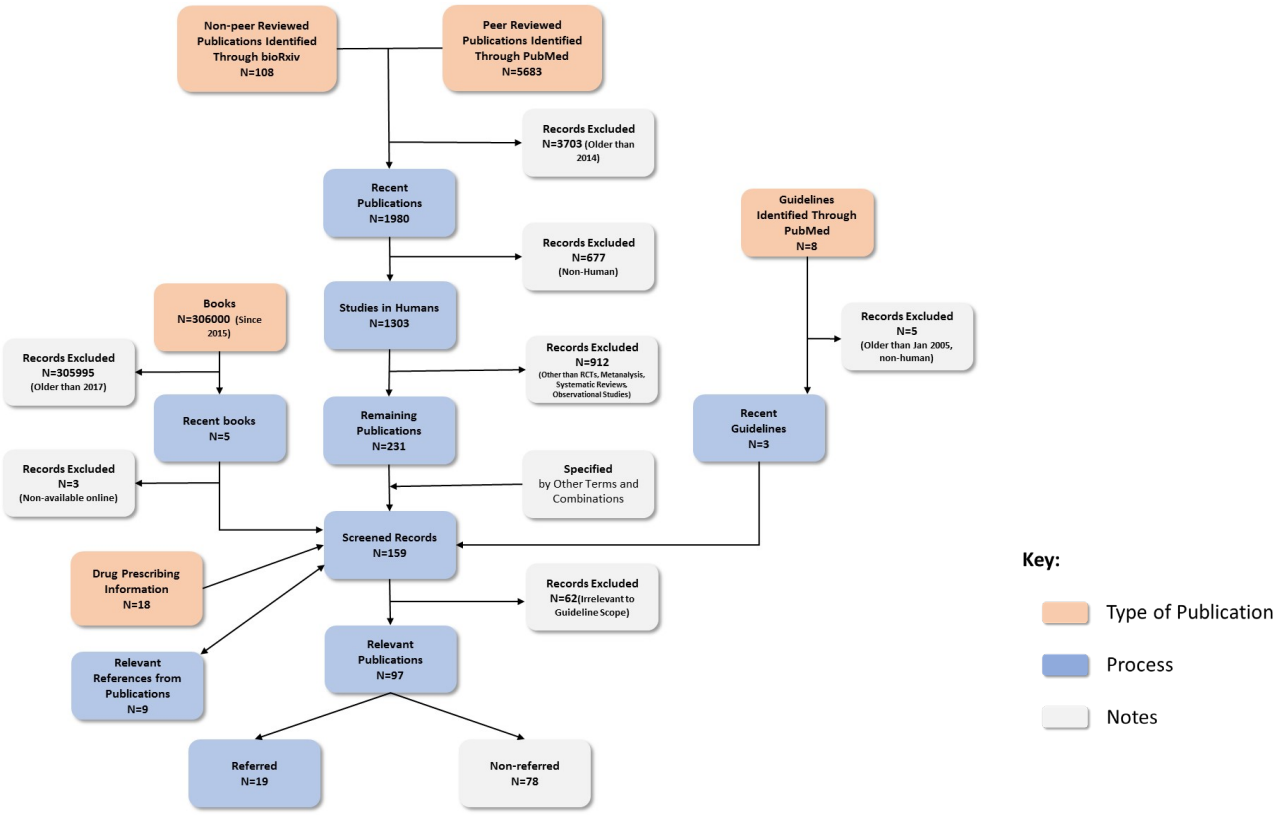

Fig B.1: Literature search results and application of exclusion criteria.

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